

# CITY OF LEEDS

## REPORT

ON THE

## Health & Sanitary Administration

OF THE CITY

FOR THE YEAR 1948

BY

I. G. DAVIES, M.D., B.S., M.R.C.P., M.R.C.S., D.P.H.,  
*Medical Officer of Health and School Medical Officer.*

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## HEALTH COMMITTEE.

LORD MAYOR (Alderman George Brett, O.B.E., J.P.)

*Chairman* : Alderman D. BEEVERS.

Alderman J. WILKINSON, J.P.	Councillor C. H. DRIVER
Councillor SIR GEORGE W. MARTIN, K.B.E., J.P. (Deputy Chairman)	„ R. B. BELL, J.P. (to April, 1948).
„ W. SPENCE	„ Z. P. FERNANDEZ, M.D.
„ ELIZABETH M. LISTER	„ W. FOWLER
„ D. KABERRY	„ MAY FISH
„ DOROTHY MURPHY, J.P.	„ LIZZIE NAYLOR, J.P.
„ P. H. HUTCHINSON	„ W. WEBSTER, J.P.
„ H. M. G. McKAY	„ J. T. DICKINSON
„ WINIFRED SHUTT	„ W. M. JONES
„ ALICE JOLLY	„ H. JOWITT (from July, 1948).

### EX-OFFICIO MEMBERS.

Alderman The Rev. C. JENKINSON, M.A., LL.B.    Alderman J. CROYSDALE.

Representatives of the Leeds Local Medical Committee invited to attend in an advisory capacity:—

Dr. J. H. E. MOORE and Mr. L. N. PYRAH (or a deputy in each case).

## SUB-COMMITTEES TO 4th JULY, 1948.

### MATERNITY AND CHILD WELFARE.

*Chairman* : Councillor LIZZIE NAYLOR, J.P.

Alderman D. BEEVERS	Councillor D. KABERRY
„ J. WILKINSON, J.P.	„ DOROTHY MURPHY, J.P.
Councillor SIR GEORGE W. MARTIN, K.B.E., J.P.	„ WINIFRED SHUTT
„ H. M. G. McKAY	„ Z. P. FERNANDEZ, M.D.
„ ELIZABETH M. LISTER	„ W. WEBSTER, J.P.
„ W. SPENCE	

### CO-OPTED MEMBERS.

Mrs. D. BEEVERS	Mrs. AUSTYN BARRAN
Mrs. D. WARD	Mrs. R. H. BLACKBURN

### TUBERCULOSIS.

*Chairman* : Councillor W. SPENCE.

Alderman D. BEEVERS	Councillor H. M. G. McKAY
„ J. WILKINSON, J.P.	„ WINIFRED SHUTT
Councillor D. KABERRY	„ ALICE JOLLY
„ DOROTHY MURPHY, J.P.	„ Z. P. FERNANDEZ, M.D.
„ SIR GEORGE W. MARTIN, K.B.E., J.P.	„ LIZZIE NAYLOR, J.P.
„ P. H. HUTCHINSON	„ W. WEBSTER, J.P.
	„ J. T. DICKINSON



## HOSPITALS.

*Chairman :* Alderman J. WILKINSON, J.P.

Alderman D. BEEVERS	Councillor R. B. BELL, J.P. (to April, 1948)
Councillor Sir GEORGE W. MARTIN, K.B.E., J.P.	" Z. P. FERNANDEZ, M.D.
" W. SPENCE	" W. FOWLER
" ELIZABETH M. LISTER	" MAY FISH
" D. KABERRY	" LIZZIE NAYLOR, J.P.
" DOROTHY MURPHY, J.P.	" W. WEBSTER, J.P.
" P. H. HUTCHINSON	" J. T. DICKINSON
" H. M. G. MCKAY	" W. M. JONES
" WINIFRED SHUTT	" C. H. DRIVER
" ALICE JOLLY	

## CATTLE, FOOD AND DRUGS.

*Chairman :* Councillor ALICE JOLLY.

Alderman D. BEEVERS	Councillor P. H. HUTCHINSON
" J. WILKINSON, J.P.	" H. M. G. MCKAY
Councillor ELIZABETH M. LISTER	" Z. P. FERNANDEZ, M.D.
" W. SPENCE	" LIZZIE NAYLOR, J.P.
" DOROTHY MURPHY, J.P.	" W. WEBSTER, J.P.

## STAFFING AND GENERAL PURPOSES.

*Chairman :* Alderman D. BEEVERS.

Alderman J. WILKINSON, J.P.	Councillor ALICE JOLLY
Councillor W. SPENCE	" C. H. DRIVER
" DOROTHY MURPHY, J.P.	" Z. P. FERNANDEZ, M.D.
" Sir GEORGE W. MARTIN, K.B.E., J.P.	" LIZZIE NAYLOR, J.P.
" H. M. G. MCKAY	" W. M. JONES
" WINIFRED SHUTT	

## MENTAL SERVICES.

*Chairman :* Councillor Z. P. FERNANDEZ, M.D.

Alderman D. BEEVERS	Councillor P. H. HUTCHINSON
" J. WILKINSON, J.P.	" ALICE JOLLY
Councillor ELIZABETH M. LISTER	" C. H. DRIVER
" Sir GEORGE W. MARTIN, K.B.E., J.P.	" W. FOWLER
	" MAY FISH

## CO-OPTED MEMBERS.

Mrs. E. BONELL

Mrs. A. R. INCE

Mrs. I. VEITCH

The Sub-Committees as shown above, appointed on November, 1947, were dissolved by resolution of the Health Committee on July 7th, 1948, and the following Sub-Committees appointed:—

## SUB-COMMITTEES—FROM 7th JULY, 1948.

### SUB-HEALTH (MATERNITY AND CHILD WELFARE) COMMITTEE.

*Chairman :* Councillor LIZZIE NAYLOR, J.P.

Alderman D. BEEVERS	Councillor Sir GEORGE W. MARTIN, K.B.E., J.P.
„ J. WILKINSON, J.P.	„ H. M. G. McKAY
Councillor ELIZABETH M. LISTER	„ WINIFRED SHUTT
„ W. SPENCE.	„ Z. P. FERNANDEZ, M.D.
„ D. KABERRY	„ W. WEBSTER, J.P.
„ DOROTHY MURPHY, J.P.	

#### CO-OPTED MEMBERS.

Mrs. AUSTYN BARRAN	Mrs. R. H. BLACKBURN
Mrs. D. BEEVERS	Mrs. D. WARD

### SUB-HEALTH (CARE AND AFTER-CARE) COMMITTEE.

*Chairman :* Alderman J. WILKINSON, J.P.

Alderman D. BEEVERS	Councillor WINIFRED SHUTT
Councillor W. SPENCE	„ ALICE JOLLY
„ D. KABERRY	„ Z. P. FERNANDEZ, M.D.
„ DOROTHY MURPHY, J.P.	„ LIZZIE NAYLOR, J.P.
„ Sir GEORGE W. MARTIN, K.B.E., J.P.	„ W. WEBSTER, J.P.
„ P. H. HUTCHINSON	„ J. T. DICKINSON
„ H. M. G. McKAY	„ H. JOWITT (from September, 1948)

### SUB-HEALTH (MENTAL SERVICES) COMMITTEE.

*Chairman :* Councillor Z. P. FERNANDEZ, M.D.

Alderman D. BEEVERS	Councillor P. H. HUTCHINSON
„ J. WILKINSON, J.P.	„ ALICE JOLLY
Councillor ELIZABETH M. LISTER	„ C. H. DRIVER
„ Sir GEORGE W. MARTIN, K.B.E., J.P.	„ W. FOWLER
	„ MAY FISH

#### CO-OPTED MEMBERS.

Mrs. E. BONELL	Mrs. A. R. INCE	Mrs. I. VEITCH
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### SUB-HEALTH (SANITATION, FOOD AND DRUGS) COMMITTEE.

*Chairman :* Councillor ALICE JOLLY

Alderman D. BEEVERS	Councillor H. M. G. McKAY
„ J. WILKINSON, J.P.	„ Z. P. FERNANDEZ, M.D.
Councillor ELIZABETH M. LISTER	„ LIZZIE NAYLOR, J.P.
„ W. SPENCE	„ W. WEBSTER, J.P.
„ DOROTHY MURPHY, J.P.	„ H. JOWITT (from September, 1948)
„ P. H. HUTCHINSON,	

## PUBLIC HEALTH STAFF.

Medical Officer of Health, Chief Tuberculosis Officer and School Medical Officer	I. G. DAVIES, M.D., B.S., M.R.C.P., M.R.C.S., D.P.H.
Deputy Medical Officer of Health (to 21/4/48)	J. F. WARIN, M.D., M.B., D.P.H.
Deputy Medical Officer of Health and Deputy School Medical Officer (from 1/6/48)	D. B. BRADSHAW, M.A., M.B., B.Ch., B.A.O., D.P.H.
Chief Assistant School Medical Officer	M. E. WILLCOCK, M.B., Ch.B., D.P.H.
Medical Officer for Mental Health Services (from 1/6/48)	J. W. AFFLECK, M.B., Ch.B., F.R.F.P.S., D.P.M.
Chief Assistant Medical Officer for Maternity and Child Welfare	CATHERINE MARGARET GRAY, M.B., Ch.B., D.P.H.
Medical Officer for Day Nurseries ..	MARION KNOWLES, M.B., Ch.B.
Assistant Medical Officer of Health in charge of Immunisation	G. R. BAXTER, M.D., B.Ch.D., D.P.H., D.T.M. & H.
Honorary Assistant Medical Officer of Health (by arrangement with the University of Leeds)	C. W. DIXON, M.D., D.P.H., D.L.O., D.C.H.
Assistant Medical Officers for Maternity and Child Welfare	SARAH N. S. BARKER, M.B., Ch.B., L.R.C.P., M.R.C.S. MARIA A. BELDON, M.B., Ch.B. EUGENIE C. ILLINGWORTH, B.Sc., M.B., Ch.B., M.R.C.S., L.R.C.P. JESSIE I. ROSIE, M.B., Ch.B., D.P.H. M. N. M. PAULIN, M.B., Ch.B., B.A.O., D.P.H. M. McD. GREIG, M.B., Ch.B. ELIZABETH HOFFA, L.R.C.P., L.R.C.S., D.C.H.
Chief Administrative Assistant ..	P. A. WOODCOCK
Executive Officer, Mental Health Services	J. S. HOYLE
Chief Sanitary Inspector .. ..	J. GOODFELLOW, M.R.San.I., A.M.I.S.E.
Chief Clinical Tuberculosis Officer (to 5/7/48), and Consultant Adviser in Tuberculosis (from 5/7/48)	F. RIDEHALGH, M.A., M.D., M.R.C.S. M.R.C.P.
Deputy Chief Clinical Tuberculosis Officer (to 5/7/48)	J. ASPIN, M.A., M.D., D.M.R.D.
Medical Director, Mass Miniature Radiography (to 5/7/48)	BRIGID AILEEN WALSH, M.B., Ch.B., B.A.O., D.P.H.
Senior Dental Officer for Maternity and Child Welfare and Tuberculosis (to December, 1948)	H. HILTON, L.D.S.
Municipal General Hospitals Medical Director (to 5/7/48)	W. MCINTOSH, M.B., Ch.B.

Seacroft Infectious Diseases Hospital, Medical Superintendent (to 5/7/48)	E. C. BENN, M.B., Ch.B., D.P.H.
Consultant Adviser, Infectious Diseases (from 5/7/48)	
Killingbeck Sanatorium, Medical Superintendent (to 5/7/48)	W. SANTON GILMOUR, O.B.E., M.B., Ch.B.
Gateforth Sanatorium, Resident Medical Officer (to 5/7/48)	A. C. MEEK, M.A., M.B., Ch.B., D.P.H.
Consultant in Child Health .. ..	Professor W. S. CRAIG, B.Sc., M.D., F.R.C.P.E., F.R.S.E., M.R.C.P.
Consultant Psychiatrists .. ..	Professor D. R. MACCALMAN, M.D. I. SUTTON, M.Sc., M.D., D.P.M., L.R.C.P., M.R.C.S. A. A. COOPER, L.R.C.P.I. and L.M., L.R.S.C.I. and L.M. A. H. WILSON, M.B., Ch.B., D.P.M. R. LEES, M.D., F.R.C.P.
Director of Venereal Diseases Clinic (to 5/7/48)	
Consultant Adviser in Venereal Diseases (from 5/7/48).	
City Bacteriologist .. ..	Professor J. W. McLEOD, F.R.S., M.B., Ch.B.
City Analyst .. ..	C. H. MANLEY, M.A., F.R.I.C.
Supervisor, Disinfecting and Disin- festation Stations (from 2/2/48)	C. W. LAMB
Supervisor, Ambulance Station ..	F. E. J. LARGE
Superintendent Health Visitor and School Nurse	MATHILDE BURKE, S.R.N., S.C.M.
Supervisor of Midwives .. ..	DOROTHY HUMPHREYS, S.R.N., S.C.M.
Superintendent Nurse, Home Nursing Service	EDITH G. MEADOWS, S.R.N., S.C.M.
Home Help Organiser .. ..	Mrs. DOROTHY W. ALFORD
Convalescent Scheme Organiser ..	Mrs. WINIFRED LINSLEY
Principal Clerks :—	
Finance .. ..	A. R. BEST
Statistics .. ..	W. B. NOTTAGE
General Sanitation .. ..	C. STEAD
Infectious Diseases .. ..	J. K. BEEVERS
Food and Drugs .. ..	S. TITTERINGTON
Health Clinic (to 5/7/48) .. ..	F. H. WOOD
Hospitals (to 5/7/48) .. ..	J. FOLKARD
Secretarial .. ..	W. B. LOFTHOUSE

## PUBLIC HEALTH DEPARTMENT.

## STAFF.

<i>Class of Employees</i>	<i>No. employed at 4/7/48</i>	<i>No. employed at 31/12/48</i>
Special Inspectors, including Smoke, Lodging House, Food and Drugs, Dairies, Meat, Workshops, Diseases of Animals and Housing	15	15
Laboratory Assistant .. .. .	1	1
Sanitary Inspectors .. .. .	33	33
Assistant Analysts .. .. .	2	1
Vaccination Officer .. .. .	1	—
Female Sanitary Inspectors .. .. .	2	2
Health Visitors .. .. .	40	39
Midwives .. .. .	38	46
Scabies and Pediculosis Visitors, Nurses and Attendants .. .. .	10	8
Sunlight and Orthopædic and Dental Nurses ..	2	1
Tuberculosis Health Visitors .. .. .	7	5
Dispensers .. .. .	11	11
Physiotherapists .. .. .	3	3
Dark Room Technicians .. .. .	2	—
Clerical Staff and Almoners .. .. .	88	81
Disinfecting Staff .. .. .	12	11
Disinfestation Staff .. .. .	19	19
Central Ambulance Station Staff .. .. .	69	87
Flushing Staff .. .. .	6	6
Mortuary Service .. .. .	3	7
Rodent Operatives .. .. .	4	4
Immunisation Nurses .. .. .	9	8
Lavatory Attendants .. .. .	15	15
Lavatory Cleaners .. .. .	11	11
Caretakers and Cleaners .. .. .	17	23
Home Helps .. .. .	18	62
Radiographers .. .. .	2	—
Factory-in-the-Field .. .. .	31	30
Wyther Hostel .. .. .	12	12
Red Court Hostel .. .. .	33	33
Day and Residential Nurseries .. .. .	229	247



# City of Leeds.

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*To the Chairman and Members of the Health Committee.*

*Ladies and Gentlemen,*

*I have the honour to present my report for the year 1948. The health of the city has, on the whole, been satisfactory and, while the detailed information relating to the various sections of the Department is contained in the body of the report, certain matters are worthy of special mention.*

*One of the outstanding events of the year was the low infant mortality rate of 35 per 1,000 births. This is the lowest rate ever recorded in the city and one of the lowest in the country for towns of comparable size. There is no doubt that this achievement of social medicine—probably one of its greatest—is due to the unremitting work which has been done over many years in public education in mothercraft and infant nurture. It is to be hoped that the rate will be further reduced by attacking the residual causes of infant deaths, chief of which is the problem of prematurity. This can be done by increased provision of facilities for the care of premature babies in hospital and by further provision by the Local Authority of domiciliary care directed to premature babies.*

**Infant Mortality**

*The year saw the implementation of the proposals of the Local Health Authority under the National Health Service Act which came into operation on July 5th. Many administrative adjustments became necessary. These were carried out with reasonable smoothness having regard to the magnitude of the changes involved. This was due in no small degree to ready co-operation and consultation between the Local Authority and the new bodies set up—The Board of Governors of the Teaching Hospitals, Regional Hospital Board, Management Committees and the Executive Council. The officers of all these authorities were in constant consultation and tribute must be paid to the readiness which they showed to consult with the officers of the Health Department and other officers of the Local Authority during the period of transition. Under the National Health Service Act the Local Health Authority has been given a new direction for the future—that of medico-social care, including the prevention and after-care of illness both of mind and body, functions which will require the continued effort and resources of the Local Authority even more than in the past.*

**National Health Service Act, 1946**



*The extended family advisory function of the health visitor, the provision of an adequate home nursing service and the rapidly expanding home help service are medico-social functions of the first magnitude.*

#### **Immunisation**

*The immunisation scheme, having won a signal victory over diphtheria, will, it is hoped, include in its scope whooping cough and there are signs that success will attend this venture after the necessary preliminary trials are completed. In January the Health Committee were asked by the Medical Research Council to undertake an extension of the whooping cough trials which had been going on during 1947. This would involve a further group of one thousand children. The Committee readily agreed and the extended trials proceeded through 1948. Co-operation from parents was readily forthcoming and there is evidence that the trials will reveal useful information. The work was carried out under the guidance of Dr. W. C. Cockburn of the Medical Research Council and under the immediate supervision of Dr. G. R. Baxter, Assistant Medical Officer of Health in charge of Immunisation.*

#### **Maternity and Child Welfare**

*The domiciliary midwifery service proceeded smoothly during the year and the grateful thanks of the Department are due to the Housing Committee and its officers for help and co-operation in the provision of houses and accommodation for midwives.*

*With the advice and guidance of Professor W. S. Craig (Professor of Child Health, University of Leeds, and Consultant Advisor in Child Health to the Health and Education Committees) consultant advisory sessions were commenced at three clinics—Central, Ellertofts and Armley. These have proved highly successful. Co-operation between the Health Department and the Leeds University Department of Child Health is close and cordial and I am indebted to Professor Craig for his helpful advice and guidance throughout the year.*

*Post-natal sessions were opened during the year at the following clinics—Armley, Barrack House, Bramley, Central, East Leeds, Ellertofts, Holbeck, Middleton, St. Nicholas and West Hunslet. The Maternity and Child Welfare Department have used every effort to impress on mothers the importance of a competent post-natal examination and full restoration to normal function after childbirth. Much ill-health and disability can result from neglect of minor disorders. Post-natal examination and care is as important a preventive service as ante-natal care.*



*During the year arrangements were made with Professor Craig for lectures to be given by him and his staff to the medical officers, health visitors and midwives of the Department. These lectures have served a most useful purpose in keeping the clinical members of the staff abreast of modern development in child health. The Health Committee readily agreed to provide these lectures for the staff which are much appreciated by them.*

*In addition to the above, certain lectures were given by distinguished consultants in various subjects.*

*It is the duty of the Local Health Authority to make provision for an adequate service of home nurses. In Leeds this duty has been entrusted to the various voluntary nursing associations who, for the purpose of administrative co-ordination, have established a Joint Committee with members of the Health Committee. In spite of handicaps due to shortage of nurses, all calls made upon the service have been met. There is evidence that this service will expand considerably. This is an important duty of the Local Authority and one which will relieve the pressure on hospital beds, in addition to being an invaluable ancillary service for the general practitioner. The Joint Committee are fully alive to their responsibilities in this direction and plans are in train for expansion and increased recruitment to the service.*

**Home Nursing**

*The public response to the provision of this service was prompt and there are already signs of a rapidly increasing demand. Public demand has been well ahead of the supply of home helps available. Each case is considered carefully by the Organiser to ensure that the limited supply is used to the best advantage and that the need comes within the precise terms laid down by the Act. There has been a growing appreciation of this service.*

**Home Helps**

*During 1948 there was much preliminary discussion with the Executive Council relating to the provision of Health Centres. The Health Committee carefully considered the areas of the city in which Health Centres should first be provided. Agreement in broad principle was reached with the Executive Council as to the planning, siting and staffing of Centres in certain areas, subject to more detailed consideration of individual centres when plans matured.*

**Health Centres**

**Tuberculosis**

Much discussion took place with officers of the Regional Board as to the functioning of the Tuberculosis Service. Dr. F. Ridehalgh, Chief Clinical Tuberculosis Officer, who under the new regime became Chest Physician under the Board, was appointed Consultant Advisor in Tuberculosis to the Local Health Authority. The health visitors and social worker remained on the staff of the Health Department but were placed under the immediate direction of the Chest Physician, who, by virtue of his appointment as Consultant Advisor, was in close and constant consultation with the Medical Officer of Health. This has proved a satisfactory arrangement. The social worker attends the Care and After-care Sub-Committee and both she and the Chest Physician attend the Voluntary Care Committee which has undertaken, as agent for the Health Committee, many of their care and after-care duties in relation to tuberculosis.

**Venereal Diseases**

A similar arrangement was made in respect of the social work in connection with venereal disease. Dr. R. Lees, Director of the Venereal Disease Clinic, was appointed Consultant Advisor to the Health Committee and provided with social workers who are on the staff of the Committee. They work under the immediate direction of the Director who also advises the Medical Officer of Health on all problems of prevention, after-care and follow-up of contacts.

**Rest Convalescence**

Under the powers of Section 28 of the Act, the Local Authority approved proposals for the convalescence of persons of all ages requiring rest convalescence on medical and social grounds.

The liability of the Authority is, however, restricted and does not extend to cases requiring medical, surgical or nursing care who are the responsibility of the Regional Hospital Board or Board of Governors.

During the period covered by this report, the scheme was administered by the Leeds Convalescent Society as agents for the Local Authority. The demand for convalescence rose steadily after the "appointed day" but the full extent of the need cannot yet be assessed. It is anticipated that, as knowledge of the available facilities spreads, the demand will grow to a very considerable extent.

**Infectious Diseases**

The Local Authority ceased to provide hospital treatment for infectious cases on the "appointed day" but their duties in prevention and epidemiological control are unchanged. To assist in problems of diagnosis, Dr. E. C. Benn, Medical Superintendent of Seacroft Hospital, has been appointed Consultant Advisor in Infectious Diseases.

*A detailed account of the Mental Health Services has been embodied in the report. Leeds was already fully equipped to undertake its duties under the National Health Service Act in relation to Mental Health, having been for many years a pioneer in this field. These services are planned for considerable extension and will expand during the next year. The Leeds Mental Health Services have been the object of much visitation by members and officers of other authorities and the services provided, particularly the Occupation Centres, have been much appreciated.*

**Mental  
Health**

*It is hoped to co-ordinate as closely as possible the Mental Health Services of the Local Authority with the mental hospitals, particularly in relation to prevention and community care. It is proposed to appoint the Medical Superintendents of the Mental Hospitals and the Medical Superintendent of Meanwood Park Colony as Consultants to the Mental Health Services Department. The advice and guidance of Professor D. R. MacCalman, Nuffield Professor of Psychiatry, University of Leeds, has been sought and willingly given. He has acted as Consultant Advisor in Psychiatry to the Department. My best thanks are due to him for his continued advice and help. It is intended that there will be established a close association between the Mental Health Department and the Child Guidance Centre to be set up by the Education Committee and both in turn linked with the work of the Juvenile Court and Probation Department.*

*During the year Dr. J. W. Affleck, Medical Officer for Mental Health continued to act as Visiting Psychiatrist to the psychiatric wards of St. James's Hospital. This arrangement was much to the advantage of the Mental Health Department and it is hoped that by agreement with the Regional Board this will continue.*

*The ambulance service felt immediately the full impact of the coming into operation of the National Health Service Act. The demands made on the service rose to unprecedented heights and a great strain put upon staff and vehicles. Credit is due to the officers and staff of the ambulance department for the way in which they shouldered the sudden and extraordinary increase of work. The grateful thanks of the Health Department are due to the Transport Committee and its officers whose expert advice, willingly given, has enabled the fleet of vehicles to stand up to the strain put upon it.*

**Ambulance  
Service**

A scheme of co-ordination was worked out in conjunction with neighbouring authorities for mutual assistance and to avoid duplication of journeys by vehicles into and out of the city. This scheme has worked well and will be subject to review after a period of time.

#### Environmental Health

A report by the Chief Sanitary Inspector on the general sanitation of the city is given under the title "Sanitary Circumstances." Much re-organisation has been effected in this department and considerable progress made in many branches, notably the control of food and disinfection.

The Chief Sanitary Inspector and his staff have devoted themselves energetically to the problems associated with cleanliness in food manufacture and sale, especially ice-cream, and in the general hygiene of food premises. In this direction they have received the utmost encouragement and support from the Health Committee.

#### Housing

During 1948 some progress was made in dealing with individual unfit houses. The numbers dealt with were very small in relation to the enormous number which need housing action. The task is truly gigantic but it is difficult to see what more could have been done by the Housing Committee during 1948 than was actually done, in view of the tremendous difficulties in the way. I am indebted to the Housing Committee and its officers for their prompt and sympathetic attention to the many problems which it was my duty to place before them.

#### Reconstitution of Committees

Immediately prior to 5th July, the main Sub-Committees of the Health Committee were re-constituted as follows:—Sanitation, Food and Drugs Committee to deal with all matters of environmental hygiene; Maternity and Child Welfare Sub-Committee to deal with all matters relating to the duties of the Local Health Authority under Sections 22, 23 and 24 of the National Health Service Act in connection with the care of mother and child and the supervision of nursing homes; Care and After-care Sub-Committee to deal with all problems of care and after-care in tuberculosis, venereal disease, and all other forms of care and prevention of disease and the provision of rest convalescence; Mental Services Sub-Committee to deal with all community problems relating to mental health.

The functions of staffing and duties under Sections 21, 25, 26, 27 and 29 were referred to the main Health Committee.



After consultation between the Health and Education Committees the following co-ordination scheme was agreed and confirmed by the City Council :—

**School  
Health  
Service**

*That the proposed joint use (wherever advantageous in the interests of children in the city) of medical, dental and nursing staffs employed by both Committees be approved in principle.*

*That the use of premises for joint purposes of both Committees be authorised.*

*That the duties of Deputy School Medical Officer be attached to the post of Deputy Medical Officer of Health.*

*That the Superintendent Health Visitor, Health Department, be appointed Superintendent Health Visitor and School Nurse, and that a Deputy Superintendent Health Visitor and School Nurse be appointed instead of the vacant post of Superintendent School Nurse being filled.*

*That the Child Guidance Centre, when set up, be available for the joint use of both Committees.*

*It is clear that for the future the work of the Local Health Authority is closely bound up with that of the Regional Board and Executive Council—particularly with the latter. The services provided by the Local Health Authority are ancillary and complementary to the general medical, dental and pharmaceutical services provided by the Executive Council. It is hoped to build up the closest co-operation between the Health Department and the general practitioners of the city, particularly in relation to the Home Nursing, Health Visiting, Domiciliary Midwifery and Home Help Services. For this to be done effectively the maximum collaboration will be necessary between the Health Committee and the Executive Council and especially through the medium of the Local Medical, Dental and Pharmaceutical Committees respectively, in relation to their particular professional problems. The Medical Officer of Health serves on the Local Medical Committee and this has been found to be of invaluable assistance in keeping in touch with general medical practice in the city.*

**Future  
Develop-  
ments**

*Within the Local Authority itself there will need to be collaboration between the Health Committee and the Children and Welfare Services Committees, all of which are carrying out duties of a medico-social nature. There is ample evidence that such collaboration will be established.*

*Leeds is fortunate in having a progressive University in its midst and this has proved to be of great assistance to the Health Department. It is intended to take full advantage of the expert technical advice and guidance available.*

**Acknowledg-  
ments**

*My grateful thanks are given to the officers of other Departments of the City Council for their helpful and courteous co-operation throughout the year.*

*To the Chairman and members of the Health Committee I tender my best thanks for their sympathetic support in the work of the Department and to the members of the Health Department staff for their unfailing loyalty and assistance during a year of change and readjustment.*

*I am,*

*Ladies and Gentlemen,*

*Your obedient servant,*

*I. G. DAVIES.*

*Public Health Department,*

*Leeds, 1.*

*November, 1949.*



## CITY OF LEEDS.

## VITAL AND MORTAL STATISTICS 1918 - 1948

Year	Population	Births	Birth-Rate	Deaths	Death-Rate	INFANT MORTALITY			STILL-BIRTHS		MATERNAL MORTALITY				DIARRHOEA AND ENTERITIS		TUBERCULOSIS (All Forms)		CANCER		Deaths from Respiratory Diseases (inc. Influenza but excl. Pul. Tuh.)	DIPHTHERIA			SCARLET FEVER		TYPHOID FEVER		MEASLES		WHOOPIING COUGH	
						Deaths — 1 year	Rate per 1,000 live births	Neo-Natal Mortality Rate	No.	Rate per 1,000 population	Deaths from Sepsis	Deaths from other causes	Total Deaths	Rate per 1,000 live births	Deaths under 2 years	Death-Rate per 1,000 births	Deaths	Death-Rate	Deaths	Death-Rate		Cases	Deaths	No. of persons immunised	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
1917	438,254	7,566	17.3	7,052	16.1	1,023	135	42.0	..	..	5	18	23	3.04	171	22.6	954	2.18	535	1.22	1,367	549	60	..	543	7	37	7	4,772	277	..	69
8	427,589	7,392	17.3	8,529	19.9	984	133	42.7	..	..	6	19	25	3.38	146	19.8	962	2.25	500	1.17	2,910	542	47	..	570	19	42	5	6,641	417	..	130
9	430,834	7,564	17.6	6,992	16.2	899	119	49.3	..	..	6	29	35	4.62	140	18.5	719	1.67	575	1.33	2,040	811	43	..	1,340	23	33	8	2,438	48	..	66
1920	448,913	11,229	25.0	6,591	14.7	1,232	110	46.3	..	..	29	28	57	5.07	140	12.5	698	1.56	492	1.10	1,513	885	64	..	1,363	17	29	4	5,459	148	..	100
1	465,500	10,144	21.8	6,285	13.5	997	98	41.3	..	..	8	30	38	3.75	184	18.1	641	1.37	554	1.19	1,360	665	38	..	1,526	14	24	2	209	5	..	72
2	466,700	9,253	19.8	6,479	13.9	935	101	43.3	..	..	14	18	32	3.46	92	9.9	653	1.40	595	1.27	1,357	470	28	..	2,722	33	14	7	9,932	152	..	115
3	469,900	8,684	18.5	5,986	12.7	773	89	41.8	..	..	10	35	45	5.18	118	13.6	637	1.36	574	1.22	1,179	368	20	..	2,134	31	9	1	4,683	50	..	32
4	471,600	8,558	18.1	6,747	14.3	921	108	38.7	..	..	9	24	33	3.86	103	12.0	657	1.40	639	1.35	1,777	289	27	..	1,256	20	25	6	6,654	46	..	87
5	472,900	8,180	17.3	6,037	12.8	748	91	37.8	..	..	24	21	45	5.50	149	18.2	599	1.27	606	1.28	1,262	422	39	..	1,166	15	9	3	5,100	39	..	47
6	473,400	8,065	17.0	6,062	12.8	748	93	38.7	..	..	14	27	41	5.08	147	18.2	585	1.24	657	1.39	1,099	374	26	..	756	5	9	1	7,076	19	..	119
7	477,600	7,790	16.3	6,198	13.0	629	81	35.2	..	..	14	24	38	4.88	88	11.3	558	1.17	649	1.36	1,070	439	28	..	773	6	14	2	8,569	117	..	44
8	474,800	7,665	16.1	6,133	12.9	606	79	37.3	..	..	14	22	36	4.70	105	13.7	542	1.14	698	1.47	976	634	21	94	3,515	18	6	1	3,638	21	..	36
9	478,500	7,426	15.5	7,898	16.5	722	97	42.3	†369	0.77	10	23	33	†4.23	86	11.6	621	1.30	684	1.43	2,037	536	26	107	3,473	29	14	3	9,486	102	..	107
1930	478,500	7,568	15.8	5,930	12.4	512	68	38.5	332	0.69	10	22	32	4.05	34	4.5	533	1.11	728	1.52	798	994	54	179	2,383	23	4	2	913	2	..	32
1	486,400	7,219	14.8	6,506	13.4	552	76	32.3	367	0.75	17	22	39	5.14	68	9.4	527	1.08	740	1.52	1,047	995	86	318	1,467	12	10	2	10,955	56	..	43
2	484,900	7,004	14.4	6,469	13.3	617	88	36.4	334	0.69	8	13	21	2.86	106	15.1	493	1.02	760	1.57	966	889	48	1,524	931	8	9	..	3,540	52	..	41
3	485,000	6,643	13.7	6,574	13.6	537	81	36.6	333	0.69	15	12	27	3.87	104	15.7	499	1.03	706	1.46	1,148	1,057	88	726	1,906	9	10	1	3,973	22	..	28
4	486,250	7,190	14.8	6,291	12.9	513	71	35.0	320	0.66	15	14	29	3.86	76	10.6	462	0.95	801	1.65	711	2,231	156	2,452	2,711	16	8	1	10,576	90	..	25
5	487,200	7,211	14.8	6,432	13.2	463	64	33.1	334	0.69	8	16	24	3.18	62	8.6	435	0.89	803	1.65	772	1,335	60	30,062	2,082	5	5	..	1,341	4	..	48
6	489,800	7,340	15.0	6,666	13.6	476	65	30.0	320	0.65	10	14	24	3.13	71	9.7	408	0.83	843	1.72	803	799	36	1,937	1,868	12	4	..	8,744	49	..	28
7	491,860	7,279	14.8	6,573	13.4	491	67	33.2	313	0.64	6	11	17	2.24	65	8.9	406	0.83	777	1.58	959	941	44	1,135	2,234	5	16	3	2,373	9	..	19
8	494,000	7,614	15.4	6,255	12.7	490	64	33.1	329	0.67	2	12	14	1.76	94	12.3	397	0.80	879	1.78	625	948	33	11,172	1,717	8	3	..	6,797	18	..	13
9*	(a) 497,000 (b) 488,000	7,079	14.2	6,535	13.4	401	57	30.2	307	0.62	6	13	19	2.60	54	7.7	413	0.85	847	1.74	662	427	20	894	960	2	12	1	1,673	2	32	18
1940	465,700	6,946	14.9	6,918	14.9	395	57	30.8	282	0.61	2	13	15	2.09	44	6.4	467	1.00	778	1.67	990	301	11	1,167	643	..	35	1	4,364	8	128	2
1	471,930	6,667	14.1	6,456	13.7	407	61	26.7	259	0.55	7	9	16	2.32	40	6.0	408	0.86	849	1.80	740	576	22	13,208	887	3	12	1	7,006	21	2,105	25
2	462,400	7,204	15.6	6,090	13.2	369	51	29.7	278	0.60	6	13	19	2.54	32	4.4	357	0.77	888	1.92	589	707	25	15,101	1,576	1	8	..	7,810	10	1,554	32
3	453,900	7,547	16.6	6,358	14.0	356	47	23.7	250	0.55	4	15	19	2.44	40	5.3	378	0.83	906	2.00	808	334	11	19,415	1,998	3	2	..	2,426	14	1,284	14
4	451,100	8,518	18.9	6,124	13.6	429	50	28.4	262	0.58	..	12	12	1.37	76	8.9	316	0.70	915	2.03	608	254	9	7,483	1,913	3	5	1	678	..	1,213	6
5	451,670	7,760	17.2	6,410	14.2	438	56	28.6	248	0.55	4	10	14	1.75	88	11.3	318	0.70	969	2.15	740	149	2	7,510	1,190	..	3	1	9,480	21	590	10
6	481,570	9,886	20.5	6,614	13.7	401	41	23.8	299	0.62	4	8	12	1.18	53	5.4	288	0.60	960	1.99	719	132	6	9,822	964	..	4	..	895	1	1,635	13
7	492,140	10,875	22.1	6,793	13.8	552	51	25.6	306	0.62	1	8	9	0.81	122	11.2	342	0.70	947	1.92	887	51	1	8,773	1,372	1	5	1	6,791	19	1,311	19
8	501,900	9,234	18.4	5,902	11.8	321	35	17.5	219	0.44	..	2	2	0.22	61	6.6	277	0.55	959	1.91	714	29	1	10,338	1,578	..	..	..	3,967	4	1,556	6

\* (a) for calculation of birth-rate.  
(b) for calculation of death-rate.

† Registration of Still-births  
in force 1929

‡ 1929 and onwards per 1,000  
total births (live and still)

|| Whooping Cough made notifiable by Measles  
and Whooping Cough Regulations, 1939.  
(In force 23rd October, 1939).







# SUMMARY

1948

LATITUDE 53°48' North. LONGITUDE 1°32' West.

AVERAGE HEIGHT ABOVE SEA LEVEL 250 feet.

AREA OF CITY .. .. . 38,296.5 Acres.

CIVILIAN POPULATION (Registrar General's Estimate) 501,900

ESTIMATED NUMBER OF HOUSES .. .. . 153,581

RATEABLE VALUE .. .. . £3,852,327

SUM REPRESENTED BY A PENNY RATE .. .. . £15,290

Average

1948. 1938-47.

BIRTH RATE (births per 1,000 living) .. .. . 18.4 17.0

MARRIAGE RATE (persons married per 1,000 living) .. 20.2 20.2

DEATH RATE (deaths per 1,000 living) .. .. . 11.8 13.7

NATURAL INCREASE OF POPULATION .. .. . 3,332 1,554  
(Excess of births over deaths in the year)

INFANT MORTALITY RATE .. .. . 35 53  
(Deaths under 1 year per 1,000 births)

DEATH RATE from Pneumonia and Bronchitis .. .. . 1.29 1.30

„ „ Cancer .. .. . 1.91 1.90

„ „ Diarrhoea and Enteritis (under 2 years)  
per 1,000 births .. .. . 6.61 8.03

	Cases	Case- rate	Deaths	Death rate
SCARLET FEVER .. .. .	1,578	3.14	—	—
DIPHTHERIA .. .. .	29	0.06	1	0.00
TYPHOID FEVER .. .. .	—	—	—	—
MEASLES .. .. .	3,967	7.90	4	0.01
WHOOPING COUGH .. .. .	1,556	3.10	6	0.01
PULMONARY TUBERCULOSIS .. .. .	497	0.99	245	0.49
OTHER FORMS OF TUBERCULOSIS .. .. .	132	0.26	28	0.06

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**Natural and Social Conditions.**

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## NATURAL AND SOCIAL CONDITIONS.

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**Area.**—The area of the city is 38,296·5 acres.

**Population.**—The Registrar General's estimate of the civilian population of the city at the mid-year of 1948 was 501,900.

**Dwelling-houses.**—The total number of occupied dwelling-houses in the city at December, 1948, was 152,793.

**Rateable Value.**—The rateable value of the city in 1948 was £3,852,327, and the sum represented by a penny rate was £15,290. The corresponding figures for 1947 were £3,819,135 and £15,792.

**Meteorological Conditions.**—During 1947 the apparatus at the City Museum was replaced and I am indebted to the Director, Dr. D. E. Owen, for the furnishing of weekly returns of meteorological data, from which the following information has been compiled.

The hours of bright sunshine registered during the year were 1,140·87, the sunniest month being May with a daily average of 7·02 hours, and the darkest December with a daily average of 0·31 hours. The daily average for the whole year was 3·12 hours.

The total rainfall for the year was 21·85 inches, the driest month being May with a total of 0·70 inches, and the wettest January with 4·84 inches. Taking the four quarters of the year, the rainfall in the first quarter was 8·15; in the second 5·32; in the third 4·21; and in the fourth 4·17 inches.

The month with the highest average temperature was July with 68·13 degrees and the lowest January with 43·77 degrees. The average temperature for the whole year was 55·58 degrees.

## VITAL AND MORTAL STATISTICS.

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### MARRIAGES.

The number of marriages which took place in Leeds during the year was 5,073 corresponding to a marriage-rate of 20·2 as compared with 5,195 and a rate of 21·1 for the previous year and an average of 4,589 and 19·7 for the previous five years.

The provisional marriage-rate for England and Wales for 1948 was 18·1 as compared with 18·5 for the previous year.

## BIRTHS.

The births registered during the year numbered 9,938 comprising 5,166 males and 4,772 females. Of these 507 males and 436 females born to parents not belonging to Leeds were transferred out, whilst 124 males and 115 females born outside the city to Leeds parents were transferred in, making a nett total of 9,234 births, comprising 4,783 males and 4,451 females.

The birth-rate was 18·4 per thousand of the civilian population, as compared with 22·1 for the previous year and an average of 19·1 for the previous five years.

The birth-rate for the city was lower than the rate for the 126 large towns, which was 20·0 per thousand of the civilian population, but higher than that of England and Wales taken as a whole which was 17·9 per thousand of the total population.

*Excess of Births over Deaths.*—The excess of births over deaths or the “ natural increase of the population ” was 3,332 as compared with 4,082 in 1947 and an average of 1,554 for the previous ten years.

*Illegitimate Births.*—Of the 9,234 (nett) births registered, 8,639 (4,501 males and 4,138 females) or 93·6 per cent. were legitimate and 595 (282 males and 313 females) or 6·4 per cent. were illegitimate. The comparative figures for the previous year were 10,176 or 93·6 per cent. legitimate and 699 or 6·4 per cent. illegitimate.

## ILLEGITIMATE BIRTHS.

Year.	Illegitimate births.	Percentage of nett births registered.	Rate per 1,000 estimated population.
1937 ..	400	5·5%	0·81
1938 ..	429	5·6%	0·87
1939 ..	387	5·5%	0·78
1940 ..	402	5·8%	0·86
1941 ..	443	6·6%	0·94
1942 ..	460	6·4%	0·99
1943 ..	583	7·7%	1·28
1944 ..	683	8·0%	1·51
1945 ..	841	10·8%	1·86
1946 ..	764	7·7%	1·54
1947 ..	699	6·4%	1·42
1948 ..	595	6·4%	1·19

*Stillbirths.*—The number of stillbirths registered during the year was 268, comprising 142 males and 126 females. The inward transfers numbered seven, namely six males and one female, which after adjustment leaves a nett total of 219 made up of 121 males and 98 females. The rate per thousand of the population was 0·44 as compared with 0·62 for the previous year. The rate for England and Wales was 0·42. Expressed as a percentage of the total births the rate was 2·3 as compared with 2·7 for 1947.

Year.	No. of stillbirths registered.*	Per cent. of total births.	Rate per 1,000 population.
1938 ..	329 (19)	4·1	0·67
1939 ..	307 (19)	4·2	0·62
1940 ..	282 (27)	3·9	0·61
1941 ..	259 (29)	3·9	0·55
1942 ..	278 (32)	3·7	0·60
1943 ..	250 (22)	3·2	0·55
1944 ..	262 (23)	3·0	0·58
1945 ..	248 (38)	3·1	0·55
1946 ..	299 (29)	2·9	0·62
1947 ..	306 (26)	2·7	0·62
1948 ..	219 (26)	2·3	0·44

\* Illegitimate Stillbirths in brackets.

### DEATHS.

The gross number of civilian deaths registered during the year was 6,106, comprising 3,219 males and 2,887 females, giving a gross death-rate of 12·2 as compared with 14·2 for the previous year. The inward transfers numbered 396, namely 177 males and 219 females, and outward transfers 600, namely 325 males and 275 females, which, after adjustment, leaves a nett total of 5,902 deaths debitable to the city, made up of 3,071 males and 2,832 females. The corresponding death-rate was 11·8 as compared with 13·8 for the previous year and an average of 13·9 for the previous five years.

The death-rate for England and Wales was 10·8 and that for the 126 large towns 11·6.

*Causes of Death.*—The principal causes of death were, in order of numerical importance, organic heart disease, cancer, cerebral hæmorrhage, bronchitis, pulmonary tuberculosis, arterio sclerosis and pneumonia which together accounted for 4,467 or 75·7 per cent. of the total deaths. Last year this group of diseases was responsible for 5,036 deaths or 74·1 per cent. of the total deaths.

*Deaths in Age Groups.*—The table on page 10 sets out the deaths according to age groups. The aggregate number of deaths of children in the age groups 0-1, 1-2 and 2-5 was 380 or 6·4 per cent. of the total deaths, as compared with 644 or 9·5 per cent. for the previous year and an average of 515 or 8·0 per cent. for the previous five years. The number of deaths in all the age groups under 45 years was 902 or 15·3 per cent. as compared with 1,270 or 18·7 per cent. in the previous year. In the remaining age groups 45-65 and 65+ the deaths numbered 5,000 or 84·7 per cent. as compared with 5,523 and 81·3 per cent. for the previous year.

*Cremations.*—Out of a total of 5,902 Leeds deaths during the year, the number of bodies disposed of by cremation was 1,368 or 23·2 per cent. as compared with 1,172 or 17·3 per cent. for the previous year. Of this number 1,095 were cremated at Lawnswood and the remainder, 273, at Cottingley Hall. The total number of cremations represents an increase of 196 on the figure for the previous year and an increase of 767 on the average number of cremations for the previous five years.

### INFANT MORTALITY.

The number of children under one year of age who died in 1948 was 321 (males 186, females 135) as compared with 552 (males 312, females 240) in 1947. The infant mortality rate was 35 as compared with 51 for the previous year and an average of 49 for the previous five years.

The rate for England and Wales was 34 or 2·9 per cent. less than the rate for Leeds whilst the rate of the 126 great towns was 39 or 11·4 per cent. greater.

*Illegitimate Death-Rate.*—Of the 595 illegitimate births, 33 or 5·5 per cent. died before reaching the age of one year, which is equal to an infant mortality rate of 55, as compared with 89 in 1947.

*Causes of Death.*—The principal causes of death of infants under one year of age during the year, in order of numerical importance, were premature birth 74 (13·4 per cent.), diarrhoea and enteritis 58 (10·5 per cent.) and pneumonia 57 (10·3 per cent.). The respiratory groups of diseases were responsible for 75 or 23·4 per cent. of the total deaths under one year of age. Last year the number was 112 or 20·3 per cent. and the average for the previous five years 99 or 22·7 per cent. The death-rate from prematurity per thousand live births was 8·0 as compared with 10·9 for the previous year.



*Prematurity.*—The following table shows the number of deaths from prematurity and the death-rate per thousand births for the years 1938-1948 :—

Year.	Births.	Deaths from prematurity.	Death-rate per 1,000 births.
1938 .. ..	7,614	136	17·9
1939 .. ..	7,079	102	14·4
1940 .. ..	6,946	97	14·0
1941 .. ..	6,667	83	12·4
1942 .. ..	7,204	91	12·6
1943 .. ..	7,547	91	12·1
1944 .. ..	8,518	119	14·0
1945 .. ..	7,760	87	11·2
1946 .. ..	9,886	105	10·6
1947 .. ..	10,875	118	10·9
1948 .. ..	9,234	74	8·0

The average death-rate from prematurity per thousand births for the ten years 1938-1947 was 12·8.

*Deaths in Age Groups.*—Of the total (321) infant deaths 58 or 18·1 per cent. took place on the first day ; 122 or 38·0 per cent. in the first week ; 162 or 50·5 per cent. in the first month ; 70 or 21·8 per cent. between one and three months ; 49 or 15·3 per cent. between three and six months ; 22 or 6·9 per cent. between six and nine months and 18 or 5·6 per cent. between nine and twelve months.

The percentage changes in the infant death-rates per thousand births in 1948 as compared with the previous ten years are as follows :—

Under 1 week decrease	32·7%	3-6 months decrease	29·3%
Under 1 month ..	37·1%	6-9 .. ..	51·0%
1-3 months increase	20·8%	9-12 .. ..	38·7%
Whole year decrease, 34·2%			

*Neo-Natal Death-Rate.*—The number of deaths of infants occurring in the first month of life was 162 or 116 fewer than in the previous year. the corresponding neo-natal death-rate being 17·5 as compared with 25·6 in 1947.

Of the total deaths under one year 50·5 per cent. occurred in the first month, and of deaths in the first month 35·8 per cent. occurred on the first day, 75·3 per cent. in the first week and 84·4 per cent. in the first two weeks.

As in previous years, deaths in the first month were largely due to prematurity.



### MATERNAL MORTALITY.

The number of mothers who lost their lives in childbirth during the year was 2, a decrease of 7 as compared with the figure for the previous year. The corresponding maternal mortality rate per thousand live births was 0.22 as compared with 0.83 for the previous year and an average of 1.48 for the previous five years. Calculated on the total number of births (live and still) the rate for the year was 0.21 as compared with 0.80 for the previous year and an average of 1.44 for the previous five years. The causes of death were toxæmia 1, embolism 1.

Both cases attended Public Health Department ante-natal clinics.

## PRINCIPAL CAUSES OF DEATH.

Death rate.	Diseases.	No. of deaths in 1948 (nett).	+ Increase or - decrease compared with 1947.
..	1. Typhoid and Paratyphoid Fevers .. ..	..	- 1
0.01	2. Cerebro-spinal Fever .. .. .	5	- 1
..	3. Scarlet Fever .. .. .	..	- 1
0.01	4. Whooping Cough .. .. .	6	- 13
0.00	5. Diphtheria .. .. .	1	+ -
0.49	6. Tuberculosis of Respiratory system ..	245	- 60
0.06	7. Other forms of tuberculosis .. ..	28	- 9
0.08	8. Syphilitic Disease .. .. .	39	- 6
0.04	9. Influenza .. .. .	22	- 20
0.01	10. Measles .. .. .	4	- 15
0.00	11. Ac. Poliomyelitis and polioencephalitis ..	1	- 4
0.00	12. Ac. Infectious Encephalitis .. ..	1	- 7
0.04	13M. Cancer of buccal cavity and oesophagus ..	22	- 6
0.11	13F. Cancer of Uterus .. .. .	56	- 3
0.34	14. Cancer of stomach and duodenum .. ..	173	+ 26
0.18	15. Cancer of Breast .. .. .	88	- 10
1.24	16. Cancer of all other sites .. .. .	620	+ 5
0.07	17. Diabetes .. .. .	33	- 1
1.45	18. Intra-cranial vascular lesions .. ..	728	- 16
3.29	19. Heart disease .. .. .	1,651	-145
0.73	20. Other diseases of circulatory system ..	367	-175
0.83	21. Bronchitis .. .. .	415	-119
0.46	22. Pneumonia .. .. .	233	- 27
0.09	23. Other respiratory diseases .. ..	44	- 7
0.12	24. Ulceration of the stomach or duodenum ..	59	- 2
0.12	25. Diarrhoea (under 2 years) .. ..	61	- 61
0.02	26. Appendicitis .. .. .	9	- 18
0.25	27. Other digestive diseases .. ..	124	- 14
0.19	28. Nephritis .. .. .	95	- 30
..	29. Puerperal and post-abortion sepsis .. ..	..	- 1
0.00	30. Other maternal causes .. .. .	2	- 6
0.15	31. Premature birth .. .. .	74	- 44
0.15	32. Congenital malformations, birth injury, infantile disease .. .. .	75	- 62
0.10	33. Suicide .. .. .	51	- 2
0.09	34. Road traffic accidents .. .. .	46	+ 14
0.30	35. Other violent causes .. .. .	150	- 20
0.75	36. All other causes .. .. .	374	- 32
11.77	Totals .. .. .	5,902	-891

## CAUSES OF, AND AGES AT DEATH DURING THE CALENDAR YEAR, 1948.

CAUSE OF DEATH	Net Deaths at the subjoined ages of "Residents" whether occurring within or without the District.									Total Deaths whether of "Residents" or "Non-Residents" in Institutions in the District
	ALL AGES.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.	
1. Typhoid and Paratyphoid Fevers .. .. .	..	..	..	..	..	..	..	..	..	..
2. Cerebro-Spinal Fever .. .. .	5	3	..	..	..	1	1	..	..	4
3. Scarlet Fever .. .. .	..	..	..	..	..	..	..	..	..	..
4. Whooping Cough .. .. .	6	3	1	2	..	..	..	..	..	5
5. Diphtheria .. .. .	1	..	..	..	1	..	..	..	..	1
6. Tuberculosis of Respiratory System .. .. .	245	..	1	1	..	28	103	87	25	98
7. Other Forms of Tuberculosis .. .. .	28	..	8	2	4	6	5	1	2	39
8. Syphilitic Disease .. .. .	39	1	..	..	..	1	4	12	21	22
9. Influenza .. .. .	22	1	3	..	..	1	2	6	9	4
10. Measles .. .. .	4	2	1	1	..	..	..	..	..	3
11. Acute Poliomyelitis and Polioencephalitis .. .. .	1	..	..	..	..	1	..	..	..	1
12. Acute Infectious Encephalitis .. .. .	1	..	..	..	..	..	..	..	1	..
13a. Cancer of Buccal Cavity and Oesophagus (Males) .. .. .	22	..	..	..	..	..	..	7	15	10
13b. Cancer of Uterus (Females) .. .. .	56	..	..	..	..	..	4	31	21	18
14. Cancer of Stomach and Duodenum .. .. .	173	..	..	..	..	..	10	66	97	72
15. Cancer of Breast .. .. .	88	..	..	..	..	..	9	41	38	24
16. Cancer of all other sites .. .. .	620	..	..	1	..	1	38	266	314	343
17. Diabetes .. .. .	33	..	..	1	..	..	2	8	22	18
18. Intra-cranial vascular lesions .. .. .	728	6	..	..	..	..	12	165	545	214
19. Heart Disease .. .. .	1,651	..	..	..	..	7	65	371	1,208	295
20. Other Diseases of Circulatory System .. .. .	367	..	..	..	..	3	12	62	290	235
21. Bronchitis .. .. .	415	9	4	..	1	..	15	135	251	105
22. Pneumonia .. .. .	233	57	7	3	2	1	9	55	99	163
23. Other Respiratory Diseases .. .. .	44	5	1	..	1	2	3	11	21	19
24. Ulcer of Stomach and Duodenum .. .. .	59	1	..	..	..	..	8	28	22	68
25. Diarrhoea under two years .. .. .	61	58	3	..	..	..	..	..	..	42
26. Appendicitis .. .. .	9	..	..	..	2	2	..	3	2	9
27. Other Digestive Diseases .. .. .	124	4	1	2	..	2	13	51	51	127
28. Nephritis .. .. .	95	1	..	1	1	1	9	36	46	61
29. Puerperal and Post-abortion Sepsis .. .. .	..	..	..	..	..	..	..	..	..	..
30. Other Maternal Causes .. .. .	2	..	..	..	..	1	1	..	..	5
31. Premature Birth .. .. .	74	74	..	..	..	..	..	..	..	90
32. Congenital Malformation, birth injury, infantile disease .. .. .	75	66	..	1	1	2	2	3	..	86
33. Suicide .. .. .	51	..	..	..	..	2	11	25	13	12
34. Road Traffic Accidents .. .. .	46	..	..	3	7	5	5	10	16	44
35. Other Violent Causes .. .. .	150	17	2	4	10	4	12	34	67	96
36. All Other Causes .. .. .	374	13	2	3	13	7	46	85	205	296
Totals .. .. .	5,902	321	34	25	43	78	401	1,599	3,401	2,629

## DEATHS IN AGE GROUPS (NETT), 1938-1948.

Together with the percentage of the total deaths, represented by each group  
(in italics).

Year.	Under 1	1-2	2-5	5-15	15-25	25-45	45-65	65+	Total.
1938	490 <i>7.8%</i>	64 <i>1.0%</i>	81 <i>1.3%</i>	100 <i>1.6%</i>	171 <i>2.7%</i>	584 <i>9.4%</i>	1,802 <i>28.8%</i>	2,963 <i>47.4%</i>	6,255
1939	401 <i>6.1%</i>	54 <i>0.8%</i>	61 <i>0.9%</i>	74 <i>1.1%</i>	155 <i>2.4%</i>	580 <i>8.9%</i>	1,860 <i>28.5%</i>	3,350 <i>51.3%</i>	6,535
1940	395 <i>5.7%</i>	62 <i>0.9%</i>	60 <i>0.9%</i>	73 <i>1.1%</i>	168 <i>2.4%</i>	646 <i>9.3%</i>	2,000 <i>28.9%</i>	3,514 <i>50.8%</i>	6,918
1941	407 <i>6.3%</i>	62 <i>1.0%</i>	79 <i>1.2%</i>	92 <i>1.4%</i>	151 <i>2.3%</i>	599 <i>9.3%</i>	1,834 <i>28.4%</i>	3,232 <i>50.1%</i>	6,456
1942	369 <i>6.1%</i>	45 <i>0.7%</i>	59 <i>1.0%</i>	86 <i>1.4%</i>	118 <i>1.9%</i>	531 <i>8.7%</i>	1,703 <i>28.0%</i>	3,179 <i>52.2%</i>	6,090
1943	356 <i>5.6%</i>	42 <i>0.7%</i>	63 <i>1.0%</i>	96 <i>1.5%</i>	144 <i>2.3%</i>	563 <i>8.8%</i>	1,657 <i>26.1%</i>	3,437 <i>54.0%</i>	6,358
1944	429 <i>7.0%</i>	34 <i>0.6%</i>	37 <i>0.6%</i>	86 <i>1.4%</i>	114 <i>1.9%</i>	500 <i>8.2%</i>	1,663 <i>27.1%</i>	3,261 <i>53.2%</i>	6,124
1945	438 <i>6.8%</i>	33 <i>0.5%</i>	37 <i>0.6%</i>	67 <i>1.1%</i>	104 <i>1.6%</i>	481 <i>7.5%</i>	1,752 <i>27.3%</i>	3,498 <i>54.6%</i>	6,410
1946	401 <i>6.1%</i>	29 <i>0.4%</i>	30 <i>0.5%</i>	49 <i>0.7%</i>	99 <i>1.5%</i>	458 <i>6.9%</i>	1,775 <i>26.8%</i>	3,773 <i>57.0%</i>	6,614
1947	552 <i>8.1%</i>	33 <i>0.5%</i>	59 <i>0.9%</i>	51 <i>0.8%</i>	85 <i>1.3%</i>	490 <i>7.2%</i>	1,667 <i>24.7%</i>	3,846 <i>56.6%</i>	6,793
1948	321 <i>5.4%</i>	34 <i>0.6%</i>	25 <i>0.4%</i>	43 <i>0.7%</i>	78 <i>1.3%</i>	401 <i>6.8%</i>	1,599 <i>27.1%</i>	3,401 <i>57.6%</i>	5,902

## DEATHS FROM STATED CAUSES UNDER ONE YEAR OF AGE.

Causes of death	Year 1947	Year 1948	Increase or decrease	Percentage total deaths under one
Cerebro-spinal (Meningo-coccal) Meningitis ..	4	3	-1	0.93
Whooping Cough .. ..	9	3	-6	0.93
Diphtheria .. .. .	..	..	..	..
Tuberculosis of Meninges and Central Nervous System .. .. .	3	..	-3	..
Tuberculosis of Intestines and Peritoneum ..	..	..	..	..
Other Tuberculous Diseases ..	..	..	..	..
Congenital Syphilis ..	1	1	..	0.31
Influenza .. .. .	1	1	..	0.31
Measles .. .. .	6	2	-4	0.62
Hæmorrhagic conditions ..	..	..	..	..
Meningitis (non-Meningo-coccal) .. .. .	5	2	-3	0.62
Convulsions .. .. .	2	3	+1	0.93
Diseases of the Ear and Mastoid Antrum ..	3	2	-1	0.62
Bronchitis .. .. .	10	9	-1	2.80
Pneumonia .. .. .	90	57	-33	17.76
Other Respiratory Diseases	2	5	+3	1.56
Inflammation of the Stomach .. .. .	..	..	..	..
Enteritis and Diarrhœa ..	121	58	-63	18.07
Hernia, Intestinal Obstruction .. .. .	4	3	-1	0.93
Congenital Malformations	59	29	-30	9.03
Congenital Debility ..	9	4	-5	1.25
Premature Birth .. ..	118	74	-44	23.05
Injury at Birth .. ..	19	8	-11	2.49
Asphyxia, Atelectasis ..	24	17	-7	5.30
Other diseases peculiar to the first year of life ..	14	8	-6	2.49
Suffocation in bed or not stated how .. .. .	19	5	-14	1.56
Lack of care for the newborn .. .. .	3	4	+1	1.25
Other causes .. .. .	26	23	-3	7.17
Totals .. .. .	552	321	-231	..

INFANTILE MORTALITY IN WARDS AT DIFFERENT PERIODS OF THE FIRST YEAR OF LIFE, CALENDAR YEAR, 1948.

Ward.	Births in year.	Under one day.		Under one week.		Under one month.		One and under three months.		Three and under six months.		Six and under nine months.		Nine and under twelve months.		Under one year.	
		Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.
Mill Hill and South	117	1	8.5	1	8.5	1	8.5	1	8.5	..	..	..	..	..	..	2	17
Westfield ..	226	3	13.3	5	22.1	6	26.5	4	17.7	2	8.8	..	..	1	4.4	13	58
Blenheim ..	513	2	3.9	5	9.7	7	13.6	8	15.6	3	5.8	2	3.9	..	..	20	39
Central ..	385	3	7.8	6	15.6	8	20.8	3	7.8	1	2.6	2	5.2	1	2.6	15	39
Woodhouse ..	274	3	10.9	5	18.2	6	21.9	2	7.3	..	..	..	..	3	10.9	11	40
North ..	440	4	9.1	9	20.5	13	29.5	1	2.3	2	4.5	..	..	..	..	16	36
Far Headingley ..	356	..	..	2	5.6	3	8.4	1	2.8	..	..	..	..	..	..	4	11
Hyde Park ..	268	2	7.5	2	7.5	4	14.9	2	7.5	1	3.7	..	..	2	7.5	9	34
Kirkstall ..	427	3	7.0	9	21.1	13	30.4	2	4.7	4	9.4	4	9.4	..	..	23	54
Burmantofts ..	339	..	..	2	5.9	2	5.9	5	14.7	3	8.8	2	5.9	..	..	12	35
Harehills ..	413	..	..	2	4.8	2	4.8	..	..	2	4.8	1	2.4	2	4.8	7	17
Potternewton ..	414	4	9.7	10	24.2	13	31.4	2	4.8	2	4.8	2	4.8	..	..	19	46
Roundhay ..	480	1	2.1	4	8.3	6	12.5	3	6.3	3	6.3	..	..	1	2.1	13	27
Cross Gates and Templenewsam	579	5	8.6	10	17.3	13	22.5	1	1.7	1	1.7	1	1.7	..	..	16	28
Richmond Hill ..	199	..	..	1	5.0	2	10.1	1	5.0	..	..	..	..	..	..	3	15
Osmondthorpe ..	377	2	5.3	3	8.0	5	13.3	2	5.3	..	..	..	..	1	2.7	8	21
East Hunslet ..	264	1	3.8	2	7.6	2	7.6	2	7.6	5	18.9	1	3.8	2	7.6	12	45
Hunslet Carr and Middleton	655	5	7.6	12	18.3	14	21.4	10	15.3	5	7.6	..	..	1	1.5	30	46
West Hunslet ..	290	2	6.9	3	10.3	4	13.8	1	3.4	2	6.9	1	3.4	..	..	8	28
Beeston ..	358	3	8.4	6	16.8	7	19.6	4	11.2	2	5.6	..	..	..	..	13	36
Holbeck (South)	242	..	..	..	..	2	8.3	3	12.4	3	12.4	1	4.1	..	..	9	37
Holbeck (North)	118	2	16.9	3	25.4	3	25.4	..	..	..	..	1	8.5	1	8.5	5	42
Armley and New Wortley	375	2	5.3	4	10.7	6	16.0	5	13.3	5	13.3	3	8.0	1	2.7	20	53
Upper Armley ..	299	1	3.3	4	13.4	6	20.1	2	6.7	1	3.3	..	..	2	6.7	11	37
Bramley ..	457	6	13.1	7	15.3	8	17.5	1	2.2	1	2.2	1	2.2	..	..	11	24
Farnley and Wortley	369	3	8.1	5	13.6	6	16.3	4	10.8	1	2.7	..	..	..	..	11	30
City ..	9,234	58	6.3	122	13.2	162	17.5	70	7.6	49	5.3	22	2.4	18	1.9	321	35



## BIRTHS AND DEATHS UNDER ONE YEAR WITH RATES.—CALENDAR YEAR 1948.

WARD.	Total Births (nett).	Birth rate per 1,000 population.	No. of legitimate births.	No. of illegitimate births.	Total deaths under one year (nett).	Death rate per 1,000 births	No. of legitimate deaths under one year.	Legitimate death rate per 1,000 legitimate births.	No. of illegitimate deaths under one year.	Illegitimate death rate per 1,000 illegitimate births.
Mill Hill and South Westfield ..	117	12.8	109	8	2	17	2	18	..	..
Blenheim ..	226	24.0	199	27	13	58	9	45	4	148
Central ..	513	25.7	437	76	20	39	17	39	3	39
Woodhouse ..	385	23.7	333	52	15	39	13	39	2	38
North ..	274	18.0	257	17	11	40	9	35	2	118
Far Headingley ..	440	19.0	424	16	16	36	15	35	1	63
Hyde Park ..	356	13.9	338	18	4	11	4	12	..	..
Kirkstall ..	268	18.1	251	17	9	34	7	28	2	118
Burnantofts ..	427	17.5	410	17	23	54	21	51	2	118
Harehills ..	339	20.5	317	22	12	35	11	35	1	45
Potternewton ..	413	18.3	392	21	7	17	6	15	1	48
Roundhay ..	414	22.0	368	46	19	46	14	38	5	109
Cross Gates and Templenewsam	480	15.3	461	19	13	27	10	22	3	158
Richmond Hill ..	579	17.0	554	25	16	28	15	27	1	40
Osmondthorpe ..	199	15.8	187	12	3	15	3	16	..	..
East Hunslet ..	377	18.0	362	15	8	21	8	22	..	..
Hunslet Carr ..	264	16.7	247	17	12	45	12	49	..	..
and Middleton ..	655	20.9	622	33	30	46	30	48	..	..
West Hunslet ..	290	18.2	272	18	8	28	7	26	1	56
Beeston ..	358	18.4	347	11	13	36	13	37	..	..
Holbeck (South) ..	242	22.2	230	12	9	37	8	35	1	83
Holbeck (North) ..	118	16.6	113	5	5	42	5	44	..	..
Armley and New Wortley ..	375	19.1	341	34	20	53	19	56	1	29
Upper Armley ..	299	17.1	284	15	11	37	11	39	..	..
Bramley ..	457	18.0	431	26	11	24	9	21	2	77
Farnley and Wortley ..	369	16.3	353	16	11	30	10	28	1	63
City ..	9,234	18.4	8,639	595	321	35	288	33	33	55

INFANTILE MORTALITY DURING THE FOURTEEN YEARS 1935-1948 AT DIFFERENT PERIODS OF  
THE FIRST YEAR OF LIFE.

YEAR.	Births in year.	Under one week.		Under one month.		One and under three months.		Three and under six months.		Six and under nine months.		Nine and under twelve months.		Under one year.	
		Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.
1935	7,211	182	25.2	239	33.1	88	12.2	62	8.6	41	5.7	33	4.6	463	64
1936	7,340	166	22.6	220	30.0	70	9.5	87	11.9	54	7.4	45	6.1	476	65
1937	7,279	186	25.6	242	33.2	84	11.5	80	11.0	48	6.6	37	5.1	491	67
1938	7,614	170	22.3	252	33.1	75	9.9	69	9.1	55	7.2	39	5.1	490	64
1939	7,079	149	21.0	214	30.2	66	9.3	50	7.1	44	6.2	27	3.8	401	57
1940	6,946	157	22.6	214	30.8	70	10.1	48	6.9	39	5.6	24	3.5	395	57
1941	6,667	123	18.4	178	26.7	69	10.3	75	11.2	41	6.1	44	6.6	407	61
1942	7,204	154	21.4	214	29.7	58	8.1	49	6.8	31	4.3	17	2.4	369	51
1943	7,547	139	18.4	179	23.7	58	7.7	62	8.2	43	5.7	14	1.9	356	47
1944	8,518	177	20.8	242	28.4	75	8.8	55	6.5	42	4.9	15	1.8	429	50
1945	7,760	151	19.5	222	28.6	93	12.0	65	8.4	34	4.4	24	3.1	438	56
1946	9,886	174	17.6	235	23.8	79	8.0	41	4.1	25	2.5	21	2.1	401	41
1947	10,875	178	16.4	278	25.6	125	11.5	87	8.0	41	3.8	21	1.9	552	51
1948	9,234	122	13.2	162	17.5	70	7.6	49	5.3	22	2.4	18	1.9	321	35



PERCENTAGE CHANGES (5 YEAR PERIODS, ALSO YEARS 1945, 1946, 1947, AND 1948) IN THE INFANT DEATH-RATE  
per 1,000 BIRTHS AS COMPARED WITH THE AVERAGE OF THE FIVE YEARS 1905-1909.

Five year period	Under one week		Under one month		One and under three months		Three and under six months		Six and under nine months		Nine and under 12 months		Under one year	
	Rate	Percentage increase or decrease over 5 years period 1905-1909	Rate	Percentage increase or decrease over 5 years period 1905-1909	Rate	Percentage increase or decrease over 5 years period 1905-1909	Rate	Percentage increase or decrease over 5 years period 1905-1909	Rate	Percentage increase or decrease over 5 years period 1905-1909	Rate	Percentage increase or decrease over 5 years period 1905-1909	Rate	Percentage increase or decrease over 5 years period 1905-1909
1905-1909	26.2	—	44.3	—	25.5	—	28.0	—	23.0	—	18.6	—	139	—
1910-1914	26.6	+1.5%	44.1	-0.5%	24.7	-3.1%	23.9	-14.6%	20.1	-12.6%	18.0	-3.2%	131	-5.8%
1915-1919	26.4	+0.8%	44.4	+0.2%	21.5	-15.7%	25.0	-10.7%	19.7	-14.3%	17.9	-3.8%	129	-7.2%
1920-1924	23.8	-9.2%	42.3	-4.5%	17.9	-29.8%	16.1	-42.5%	13.2	-42.6%	11.6	-37.6%	101	-27.3%
1925-1929	24.3	-7.3%	38.2	-13.8%	15.1	-40.8%	13.4	-52.1%	11.5	-50.0%	10.1	-45.7% <sup>a</sup>	88	-36.7%
1930-1934	26.1	-0.4%	35.8	-19.2%	12.9	-49.4%	10.6	-62.1%	9.5	-58.7%	7.8	-58.1%	77	-44.6%
1935-1939	23.3	-11.1%	31.9	-28.0%	10.5	-58.4%	9.5	-66.1%	6.6	-71.3%	4.9	-73.7%	63	-54.7%
1940-1944	20.3	-22.5%	27.9	-37.0%	9.0	-64.7%	7.9	-71.8%	5.3	-77.0%	3.2	-82.8%	53	-61.9%
Year 1945	19.5	-25.6%	28.6	-35.4%	12.0	-52.9%	8.4	-70.0%	4.4	-80.9%	3.1	-83.3%	56	-59.7%
Year 1946	17.6	-32.8%	23.8	-46.3%	8.0	-68.6%	4.1	-85.4%	2.5	-89.1%	2.1	-88.7%	41	-70.5%
Year 1947	16.4	-37.4%	25.6	-42.2%	11.5	-54.9%	8.0	-71.4%	3.8	-83.5%	1.9	-89.8%	51	-63.3%
Year 1948	13.2	-49.6%	17.5	-60.5%	7.6	-70.2%	5.3	-81.1%	2.4	-89.6%	1.9	-89.8%	35	-74.8%

# MINISTRY OF HEALTH TABLES.

## TABLE I.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1948 AND PREVIOUS YEARS.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NET DEATHS BELONGING TO THE DISTRICT.			
		Un-corrected Number.	Nett.		Number.	Rate.	Of Non-residents registered in the District.	Of Residents not registered in the District.	Under 1 Year of Age.		At all Ages.	
			Number.	Rate.					Number.	Rate per 1,000 Net Births.	Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1931	486,400	7,557	7,219	14.8	6,810	14.0	553	249	552	76	6,506	13.4
1932	484,900	7,368	7,004	14.4	6,771	14.0	550	248	617	88	6,469	13.3
1933	485,000	7,070	6,643	13.7	6,851	14.1	538	261	537	81	6,574	13.6
1934	486,250	7,691	7,190	14.8	6,666	13.7	619	244	513	71	6,291	12.9
1935	487,200	7,751	7,211	14.8	6,763	13.9	576	245	463	64	6,432	13.2
1936	489,800	7,845	7,340	15.0	7,003	14.3	620	283	476	65	6,666	13.6
1937	491,860†	7,844	7,279	14.8	6,915	14.1	656	314	491	67	6,573	13.4
1938	494,000	8,159	7,614	15.4	6,592	13.3	597	260	490	64	6,255	12.7
1939	(a) 497,000 (b) 488,000	7,434	7,079	14.2	6,821	14.0	619	333	401	57	6,535	13.4
1940	465,700	7,459	6,946	14.9	7,178	15.4	638	378	395	57	6,918	14.9
1941	471,930	7,027	6,667	14.1	6,610	14.0	655	501	407	61	6,456	13.7
1942	462,400	7,355	7,204	15.6	6,256	13.5	589	423	369	51	6,090	13.2
1943	453,900	7,830	7,547	16.6	6,532	14.4	595	421	356	47	6,358	14.0
1944	451,100	8,611	8,518	18.9	6,314	14.0	601	411	429	50	6,124	13.6
1945	451,670	8,258	7,760	17.2	6,580	14.6	595	425	438	56	6,410	14.2
1946	481,570	10,267	9,886	20.5	6,795	14.1	570	389	401	41	6,614	13.7
1947	492,140	11,394	10,875	22.1	6,982	14.2	567	378	552	51	6,793	13.8
1948	501,900	9,938	9,234	18.4	6,106	12.2	600	396	321	35	5,902	11.8

Area of District in acres (land and inland water) } 38,296.5

Total population at all ages at the 1931 Census 482,809

† Population adjusted to allow for change in boundary during the year. The mid-year population after the change is 491,886

(a) Population used for calculation of birth-rate

TABLE II. CASES OF INFECTIOUS DISEASES ORIGINALLY NOTIFIED BEFORE ALTERATION OF DIAGNOSIS DURING THE CALENDAR YEAR 1948.

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.																Total Cases removed to Hospital.
	At all Ages.				At Ages—Years.												
	Under 1.		1 and under 5 years.		5 and under 15 years.		15 and under 25 years.		25 and under 45 years.		45 and under 65 years.		65 and upwards.				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Small-pox .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera (C.) Plague (F.) ..	41	53	1	..	14	11	13	12	6	16	1	2	..	..	41	53	..
Diphtheria (including Membranous Croup)	51	96	..	..	..	2	2	3	1	5	19	18	22	50	7	18	..
Erysipelas .. .. .	749	862	2	223	206	444	566	42	56	33	26	7	6	..	247	270	..
Scarlet Fever. . . . .	1,972	1,991	94	102	1,154	1,191	701	677	12	12	9	8	2	1	31	27	..
Measles .. .. .	755	802	88	97	481	509	182	183	1	..	3	12	..	1	36	29	..
Whooping Cough .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Typhus Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever .. .. .	2	2	..	..	..	..	1	..	1	..	..	1	..	..	2	2	..
Relapsing Fever (R.) Continued Fever (C.)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Pyrexia .. .. .	..	73	..	..	..	..	..	..	..	27	..	46	..	..	..	11	..
Cerebro-Spinal Fever .. ..	19	17	3	3	7	5	3	3	3	2	2	3	1	1	18	14	..
Polionymyelitis .. .. .	6	5	..	..	1	1	2	3	2	..	..	1	1	..	5	5	..
Polio Encephalitis .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ophthalmia Neonatorum ..	14	11	14	11	..	..	..	..	..	..	..	..	..	..	..	..	..
Encephalitis Lethargica ..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	2	..	..
Malaria .. .. .	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..
Dysentery .. .. .	28	21	..	..	9	3	6	8	1	4	9	3	2	2	1	12	14
Other Diseases .. .. .	159	235	82	69	43	40	18	16	5	47	5	48	6	13	2	159	235
Pulmonary Tuberculosis ..	280 (21)	217 (19)	..	..	5	2	5	15	56 (6)	76 (5)	105 (13)	98 (13)	98 (1)	24 (1)	2	282	193
Other forms of Tuberculosis	63 (3)	69 (3)	..	..	16	14 (1)	20 (3)	16	10	15 (2)	11	17	3	6	3	29	36
Pneumonia (Acute Primary)	200	140	10	9	36	24	40	18	9	11	33	34	50	28	22	16	..
„ (Acute Influenzal)	15	4	2	..	1	..	..	1	..	..	3	1	6	1	3	1	..
TOTALS .. .. .	4,355	4,599	294	293	1,990	2,009	1,437	1,521	149	271	239	328	199	135	47	876	915

The figures shown in brackets are "Transfer" Cases and are included in totals.

TABLE IIA. ACCEPTED CASES OF INFECTIOUS DISEASES (AFTER CORRECTION OF DIAGNOSIS) DURING THE CALENDAR YEAR 1948.

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.																Total Cases removed to Hospital.		
	At all Ages.				At Ages—Years.														
	Under 1.				1 and under 5 years.		5 and under 15 years.		15 and under 25 years.		25 and under 45 years.		45 and under 65 years.		65 and upwards.		M.	F.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
Small-pox .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera (C.) Plague (F.) .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria (including Membranous Group)	17	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	17	12
Erysipelas .. .. .	51	95	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11	24
Scarlet Fever.. .. .	735	843	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	233	251
Measles .. .. .	1,975	1,992	94	99	1,155	1,195	43	52	33	25	7	7	..	..	..	..	..	34	28
Whooping Cough .. .. .	755	801	88	97	481	508	182	183	1	..	..	..	..	..	..	..	..	36	28
Typhus Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Relapsing Fever (R.) Continued Fever (C.)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Pyrexia .. .. .	..	73	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cerebro-Spinal Fever .. .. .	5	7	1	2	2	1	..	..	27	46	..	..	..	..	..	..	..	4	4
Polionymelitis .. .. .	2	4	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	1	4
Polio Encephalitis .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ophthalmia Neonatorum .. .. .	14	11	14	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Encephalitis Lethargica .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Malaria .. .. .	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dysentery .. .. .	34	22	1	..	13	6	8	7	1	4	8	3	2	1	1	1	18	15	..
Other Diseases .. .. .	208	309	84	72	61	56	31	35	13	66	11	61	8	17	..	2	208	309	..
Pulmonary Tuberculosis .. .. .	280 (21)	217 (19)	..	..	5	2	5	15	56 (6)	76 (5)	105 (13)	98 (13)	98 (11)	24 (1)	11 (1)	2	282	193	..
Other forms of Tuberculosis .. .. .	63 (3)	69 (3)	..	..	16	14 (1)	20 (3)	16	10	15 (2)	11	17	3	6	3	1	29	36	..
Pneumonia (Acute Primary) .. .. .	200	140	10	9	36	24	40	18	9	11	33	34	50	28	22	16	..	..	..
" (Acute Influenzal) .. .. .	15	4	2	..	1	..	..	1	..	..	3	1	6	1	3	1	..	..	..
TOTALS .. .. .	4,355	4,599	294	293	1,990	2,009	1,437	1,521	149	271	239	328	199	135	47	42	876	915	915

The figures shown in brackets are "Transfer in" cases and are included in totals.

TABLE IIA. (continued).

TOTAL ACCEPTED CASES (AFTER CORRECTION OF DIAGNOSIS) IN EACH LOCALITY, (e.g., Parish or Ward) of the District.

NOTIFIABLE DISEASE.	Mill Hill and South.	Westfield.	Blenheim.	Central.	Woodhouse.	North.	Rat Headingley.	Hyde Park.	Kirkstall.	Burmantofts.	Harehills.	Potternewton.	Roundhay.	Cross Gates and Tempnewsum.	Richmond Hill.	Osmondthorpe.	East Hunslet.	Hunslet Carr and Middleton.	West Hunslet.	Beeston.	Holbeck (South).	Holbeck (North).	Armley and New Wortley.	Upper Armley.	Bramley.	Farnley and New Wortley.	City.	
Small-pox .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Cholera (C) Plague (P) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Diphtheria (including Membranous Group) .. ..	1	..	4	1	..	..	5	..	1	2	..	2	1	1	..	3	..	3	..	..	..	3	2	..	..	..	..	
Erysipelas .. ..	..	4	9	7	6	12	9	3	8	2	8	8	3	15	3	10	4	6	8	5	4	..	5	3	1	3	146	
Scarlet Fever.. ..	27	27	39	19	34	72	52	37	80	25	71	53	106	113	36	76	72	143	45	56	25	19	75	75	96	100	1,578	
Measles .. ..	48	141	101	83	61	193	78	102	252	122	185	130	258	380	109	235	169	349	75	204	72	33	237	53	195	102	3,907	
Whooping Cough .. ..	18	23	53	67	23	47	39	24	53	56	113	48	117	261	37	67	63	114	35	51	30	19	51	31	69	47	1,556	
Typhus Fever .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Enteric Fever .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Relapsing fever (R) Continued fever (C) .. ..	..	..	..	..	..	1	..	2	2	27	..	1	..	1	..	1	2	..	..	1	..	..	..	29	2	..	73	
Puerperal Pyrexia .. ..	1	1	1	..	2	1	..	2	1	1	1	1	2	1	..	..	..	..	..	..	..	1	..	2	1	..	12	
Cerebro-Spinal Fever ..	..	..	..	..	2	..	..	..	1	1	1	1	2	1	..	1	..	..	..	..	..	..	..	1	..	..	6	
Polio myelitis .. ..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Polio Encephalitis .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	..	..	
Ophthalmia Neonatorum ..	..	1	3	2	..	..	1	..	..	1	1	1	..	3	..	..	1	2	..	..	..	2	2	6	..	25		
Encephalitis Lethargica ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Malaria .. ..	2	1	1	5	..	3	17	4	3	..	1	6	4	1	..	..	..	..	..	..	..	..	..	..	..	1	56	
Dysentery .. ..	59	16	42	29	10	10	23	17	20	19	15	33	45	14	4	19	11	30	10	13	8	11	24	12	15	8	517	
Other Diseases .. ..	4	20	(2) 33	(3) 26	(2) 21	(3) 13	(1) 20	(2) 18	(2) 31	(4) 10	(2) 23	(3) 19	(2) 28	(3) 40	11	(1) 19	16	(2) 29	(1) 14	(2) 16	15	10	10	11	(2) 16	(1) 24	(1) 497	
Pulmonary Tuberculosis ..	1	5	6	(2) 5	8	5	2	..	10	(1) 5	3	5	(1) 4	16	3	3	3	3	6	8	8	6	3	3	4	10	5	132
Other Forms of Tuberculosis ..	10	10	12	7	11	6	9	7	12	3	13	4	5	28	9	17	28	34	11	13	9	13	26	8	11	24	340	
Pneumonia (Acute primary) ..	..	..	..	..	..	1	1	..	4	2	..	..	..	3	..	..	..	3	..	..	1	..	1	..	1	2	19	
Do. (Acute Influenzal) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
TOTALS .. ..	172	249	304	253	176	364	256	214	477	274	434	311	573	878	212	451	369	722	206	368	170	111	440	231	423	316	8,954	

The figures shown in brackets are "Transfer in" Cases and are included in totals.



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## **Infectious and other Diseases**

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## INFECTIOUS AND OTHER DISEASES

BY

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1948 has been a very satisfactory year, with no major outbreaks of any infectious disease to report. It will be recalled that 1947 had been an epidemic year for poliomyelitis and there was a risk that incidence might again be high in 1948. There were, however, only six cases in the year, with no deaths, though one case notified in the previous year died in 1948.

Diphtheria again set up a new low record with only 29 cases and one death. This fine achievement is due to the high proportion of Leeds children who have been immunised.

Scarlet fever was more prevalent than in 1947 but remained very mild. There were no deaths during the year from this disease.

Measles showed a higher incidence than usual in an inter-epidemic year but caused only four deaths. Arrangements for the supply of "measles serum" continued as before.

Whooping cough also increased slightly in incidence but caused fewer deaths. The trial of whooping cough vaccines continued. It will not be possible to assess results before late 1949 at the earliest, but so far the impressions are encouraging.

It is pleasing to record that deaths of children under two years from diarrhoea and vomiting were only half those in the previous year.

There were several small outbreaks of bacillary dysentery during the year. All were promptly brought under control and there were no deaths.

The investigations into anthrax at a local tannery were completed. Preventive measures were introduced which seem to have been effective.

There was a further sharp fall in notifications of scabies. Considerable improvements in the arrangements for treatment of scabies and of pediculosis were made during the year.

The Infectious Diseases Hospital at Seacroft was transferred to the Leeds Regional Hospital Board on the 5th July, but close and friendly liaison is maintained.

**Diphtheria.**—Accepted cases during the year numbered 29, all of which were treated in hospital, compared with 51, all treated in hospital, a year ago. The case-rate of 0·06 was the lowest ever recorded. Only one case of laryngeal diphtheria occurred during the year.

There was one death representing a case mortality of 3·4 per cent. as compared with one death (2·0 per cent.) last year. This death was in a child stated to have received one injection of immunising material some years ago whilst living in another town. The Authority concerned was unable to corroborate this.

The number of accepted cases this year is a new low record for the city. This is due to the high degree of protection conferred upon the child population by immunisation. To maintain this satisfactory trend there must be no easing up in the immunisation campaign and it is hoped that before very long every Leeds child will be protected against diphtheria and that this once dreaded disease will then become a rarity.

Year.	Cases Notified.	Case-rate.	Deaths.	Death-rate.
1928	634	1·34	21	0·08
1929	536	1·12	26	0·09
1930	994	2·08	54	0·09
1931	995	2·05	86	0·07
1932	889	1·83	48	0·06
1933	1,057	2·18	88	0·07
1934	2,231	4·59	156	0·10
1935	1,335	2·74	60	0·09
1936	799	1·63	36	0·08
1937	941	1·91	44	0·07
1938	948	1·92	33	0·07
1939	427	0·88	20	0·05
1940	301	0·65	11	0·06
1941	576	1·22	22	0·07
1942	707	1·53	25	0·05
1943	334	0·74	11	0·03
1944	254	0·56	9	0·02
1945	149	0·33	2	0·00
1946	132	0·27	6	0·01
1947	51	0·10	1	0·00
1948	29	0·06	1	0·00

**Scarlet Fever.**—An increase in the number of accepted cases occurred during the year ; 1,578 of which 484 (30·7 per cent.) were removed to hospital. The corresponding figures for last year were 1,372 and 547 (39·9 per cent.). The case-rate was 3·14 as compared with 2·79 for the previous year. There were no deaths.

The disease continues to be of a mild type and the majority of cases are now nursed at home. Only in exceptional circumstances are cases removed to hospital.

*Return Cases.*—Of the 588 cases discharged from hospital during the year, 5 gave rise to return cases, a rate of 0·9 per cent.

**Smallpox, Typhoid and Paratyphoid Fevers, Typhus, Plague and Cholera.**—No case of any of these diseases occurred in the city during the year ; 29 contacts and persons from infected countries were kept under observation, as were 4 chronic enteric carriers.

Two doubtful cases of smallpox were referred to the Department for a second opinion. Both proved to be chickenpox.

**Measles.**—There were 3,967 accepted cases of this disease during the year, of which 62 (1·6 per cent.) were removed to hospital. Of the total cases 4 died representing a case mortality rate of 0·10 per cent. The corresponding figures for last year were 6,791 and 188 (2·8 per cent.) and 19 deaths, a case mortality rate of 0·28 per cent.

As it was not an epidemic year for measles, there was not as great a demand for "measles serum" as last year. We were, therefore, able to issue "convalescent serum" throughout the year. When a severe outbreak does occur, however, it may not always be possible to maintain supplies of "convalescent serum." For this we are completely dependent upon the public spirit of those who volunteer to give a little blood. A special follow-up of adults who have recently had measles is to be made by the Department next year in an endeavour to obtain their co-operation, and it is hoped that this will produce a better response than hitherto. If sufficient volunteers do not come forward then the normal "adult serum" will have to be used. Whilst good results have been achieved by the use of "adult serum," "convalescent serum" gives even better results.

During the year 140 × 10 c.c. bottles of "convalescent serum" were issued as follows :—

## 1. To general practitioners.

(a) in Leeds	..	..	..	73
(b) out of the city	..	..	..	—

## 2. To hospitals and institutions.

(a) in Leeds	..	..	..	63
(b) out of the city	..	..	..	4

A follow-up in 56 cases treated by general practitioners in Leeds gave the following results:—

Result	Serum issued for :	
	Prevention	Attenuation
No attack (complete protection)	.. 29	6
"Attenuated" or mild attack	.. 13	5
Attack not attenuated	.. .. —	1
Serum not given or wrongly given or not traced	.. .. 2	—

No complications occurred and there were no cases of jaundice.

**Whooping Cough.**—There was an increase in the number of accepted cases of this disease during the year ; 1,556 of which 64 (4.1 per cent.) were removed to hospital, as compared with 1,311 and 89 (6.8 per cent.) last year.

There were 6 deaths, representing a case mortality rate of 0.4 per cent. as compared with 19 (1.4 per cent.) a year ago.

**Puerperal Pyrexia.**—There was a decrease in the number of accepted cases of this disease during the year ; 73 as compared with 91 a year ago and 79 in 1946. Of these 57 (78.1 per cent.) occurred in institutions, 2 (2.7 per cent.) in the practices of general practitioners and 14 (19.2 per cent.) in midwives' practices. Of the total notifications 11 (15.1 per cent.) were accepted as true sepsis and treated in Seacroft Hospital. Two of these occurred in the practices of midwives and 9 in institutions. There were no deaths.

**Ophthalmia Neonatorum.**—There was a decrease in the number of accepted cases of this disease during the year ; 25 as compared with 34 a year ago. Of these, 2 (8.0 per cent.) were removed to Seacroft Hospital. The results of treatment were as follows :—

Recovery apparently perfect	..	..	..	19
Sight of both eyes affected	..	..	..	—
Still under treatment	..	..	..	4
Died from other diseases..	..	..	..	—
Result not known..	..	..	..	2

**Erysipelas.**—An increase in the number of accepted cases of this disease occurred during the year ; 146 as compared with 92 a year ago and 133 in 1946. Of these 35 (24.0 per cent.) were removed to Seacroft Hospital. There were no deaths.

**Malaria.**—Only one case was reported during the year, the same as last year. Infection was contracted abroad. The case was removed to Seacroft Hospital.

**Dysentery.**—There was a marked increase in the number of accepted cases of this disease during the year ; 56 (as compared with 13 last year) of which 24 occurred at home and 32 in institutions in the city. The number treated at Seacroft Hospital was 33 or 58.9 per cent. of the total. Of the 56 cases, 8 were Flexner and 35 Sonne, while the remaining 13 were not typed. There were no deaths.

During the early part of the year (January to April) small outbreaks of Sonne dysentery occurred in three institutions in the city. Twelve patients, four at each institution, were affected, the diagnosis being confirmed bacteriologically in all twelve cases. Eight of them were removed to Seacroft Hospital. Prompt measures at each institution prevented the spread of infection.

During the month of September, this disease occurred again in the children's ward of one of the institutions affected earlier in the year. There were five cases (three children and two staff). All were removed to hospital.

In December, four cases of Flexner dysentery (two children and two nurses) occurred in a residential nursery in the city. The diagnosis was confirmed bacteriologically in all four cases. One further case (staff) occurred on January 1st, 1949, after which the outbreak came to an end. All were removed to Seacroft Hospital.

**Poliomyelitis.**—It is gratifying to record a fall in incidence. There were only 6 accepted cases during the year, of which 5 were removed to Seacroft Hospital. There was one death representing a case mortality rate of 16.7 per cent. This was a case notified in 1947. The corresponding figures for last year were 53 cases and 5 deaths (case mortality rate 9.4 per cent.).

Of the six cases, four occurred during the month of October and the remaining two in November. All had paralysis.

The following table shows the age groups affected :—

	0-5	5-10	10-15	15-25	25-35	35-45	45-55	Totals
Males ..	1	..	..	..	..	..	1	2
Females ..	1	1	1	..	1	..	..	4
Totals ..	2	1	1	..	1	..	1	6

The results of treatment were as follows :—

Recovered ..	..	..	..	..	4
Still under treatment ..	..	..	..	..	2
(a) moderate paralysis ..	..	..	..	..	1
(b) severe paralysis ..	..	..	..	..	1

Each case was thoroughly investigated and in no instance was there evidence of case to case spread. The cases occurred in five different wards of the city and the only district with more than one case was Roundhay (2).

**Acute Polioencephalitis.**—No case of this disease occurred during the year and there were no deaths.

**Encephalitis Lethargica.**—No new case of this disease was reported during the year. One death was recorded in a person who had not previously been notified as suffering from the disease.

**Cerebro-Spinal Fever.**—A decrease in the number of accepted cases of this disease occurred during the year ; 12 of which 8 (66·7 per cent.) were removed to Seacroft Hospital, as compared with 17 and 12 (70·6 per cent.) last year.

There were 5 deaths giving a case mortality rate of 41·7 per cent. as compared with 6 and 35·3 per cent. in 1947.

**Anthrax.**—During the year six cases of this disease were reported to the Department. The patients had been employed in handling goat skins and hides at two large tanneries in the city. Detailed information was sent to H.M. Inspectors of Factories, London and Leeds, to whom the disease is notifiable and who are responsible for measures of protection within the factories. An Inspector from this Department supervised the necessary measures of disinfection. All the patients had been diagnosed at an early stage and recovered. Four of them contracted the infection at the



same tannery. Two other cases had occurred in November and December last year at this tannery. The premises were inspected jointly with Officers of the local Factory Department. Anthrax infection occurs either by direct handling of skins or from infected dust, and precautions in the factory against these risks were found to be inadequate. Recommendations were made to the management which they agreed to carry out under the supervision of the Factory Department. It is hoped that the steps taken will prevent further cases.

**Food poisoning.**—During the year two cases of food poisoning due to *Salmonella* came to the notice of the Department. One of them was fatal. This was a man aged 73 years who died in hospital. The infecting organism was *Salmonella typhi-murium* (*B. Aettrycke*).

Enquiries were made at the home address of the deceased but the source of infection was untraced.

In the other case, a man aged 24 years, an in-patient of a mental institution in the city, *Salmonella Thompson* was isolated. The patient recovered.

In addition to the above, four cases of alleged food poisoning, in two separate households, were reported by a general medical practitioner. All the patients had been taken ill about two hours after eating portions of two tongue sandwiches purchased from the same cafe. One case was removed to hospital; the upset in the other three was of a mild nature and of short duration. None of the suspected food was available for examination. The cafe premises were found to be satisfactory and every precaution was taken by the staff in the handling of food.

Apart from the two sandwiches in question, all the tongue was served in the cafe as a mid-day meal to workpeople employed in the district. Further enquiries failed to reveal any other cases of illness. All four patients recovered.

There were also three cases of suspected food poisoning reported but all investigations were negative and the cause of the illness was not established. All recovered.

**Pneumonia.**—Accepted cases during the year numbered 359, of which 340 (94·7 per cent.) were primary and 19 (5·3 per cent.) influenzal. The corresponding figures for last year were 305, of which 286 (93·8 per cent.) were primary and 19 (6·2 per cent.)



influenzal. There were 233 deaths from all forms of pneumonia as compared with 260 a year ago. The mortality rates were 0.46 and 0.53 respectively.

**Tuberculosis.**—The number of cases on the register at the end of 1948 was 3,662 as compared with 3,894 at the corresponding period of last year, a decrease of 236.

*Notifications.*—During the year 497 cases of pulmonary tuberculosis (of which 40 were transfers from other areas) and 132 non-pulmonary (of which six were transfers from other areas) were notified, making a total of 629 cases (of which 46 were transfers). Of the total 343 were males and 286 females. Compared with the previous year this is a decrease of 21 in the pulmonary and a decrease of one in the non-pulmonary notifications, and compared with the average of the previous five years, a decrease of 71 pulmonary and a decrease of 23 non-pulmonary.

The case-rate of pulmonary tuberculosis was 0.99, of non-pulmonary 0.26, and of all forms of the disease 1.25, as compared with 1.05, 0.27 and 1.32 respectively for the previous year.

Of the total cases of pulmonary tuberculosis notified 5.4 per cent. were children under 15 years, 26.6 per cent. persons between 15 and 25, and 68.0 per cent. were in the remaining age groups. The corresponding figures for the previous year were 5.6 per cent., 24.9 per cent. and 69.5 per cent. respectively.

As regards the non-pulmonary type of disease 50.0 per cent. were children under 15 years and 50.0 per cent. persons over 15 years. The corresponding figures for the previous year were 54.9 per cent. and 45.1 per cent. respectively.

Of the total cases notified 412 were by medical practitioners, 171 came from institutions and 46 were by transfer from other areas.

The number of cases of pulmonary tuberculosis not heard of until time of death was 19 and the number of non-pulmonary 7, making a total of 26 or 4.1 per cent. of the total notifications for the year. This is an increase of 6 on the figure for the previous year.

Out of a total of 273 deaths from tuberculosis of all forms, 48 or 17.6 per cent. were notified in the same year as death occurred, 4 or 1.5 per cent. in the same month and 19 or 7.0 per cent. in the same week. In the previous year there were 59 or 17.2 per cent. in the same year as death occurred, 8 or 2.4 per cent. in the same month and 46 or 13.5 per cent. in the same week.

*Deaths.*—The total deaths from tuberculosis of all forms during the year numbered 273, of which 174 were males and 99 females. In the previous year the total was 342, of which 200 were males and 142 females. Of the total pulmonary tuberculosis accounted for 245 or 89.7 per cent. and non-pulmonary 28 or 10.3 per cent. The death-rate from pulmonary tuberculosis was 0.49, from non-pulmonary 0.06, and from all forms of the disease 0.55, as compared with 0.62, 0.08 and 0.70 respectively for the previous year.

Set against the average rates for the previous five years these figures represent a decrease of 0.13 in the pulmonary rate, a decrease of 0.02 in the non-pulmonary rate and a decrease for all forms of the disease of 0.15.

## TUBERCULOSIS.

YEAR.	DEATHS.						NOTIFICATIONS.					
	Pulmonary tuberculosis.		Non-pulmonary tuberculosis.		All forms tuberculosis.		Pulmonary tuberculosis.		Non-pulmonary tuberculosis.		All forms tuberculosis.	
	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Cases.	Case-rate.	Cases.	Case-rate.	Cases.	Case-rate.
1935	358	0.73	77	0.16	435	0.89	569	1.17	141	0.29	710	1.46
1936	346	0.71	62	0.13	408	0.83	531	1.08	163	0.33	694	1.42
1937	354	0.72	52	0.11	406	0.83	548	1.11	214	0.44	762	1.55
1938	336	0.68	61	0.12	397	0.80	511	1.03	176	0.36	687	1.39
1939	353	0.72	60	0.12	413	0.85	555	1.14	137	0.28	692	1.42
1940	416	0.89	51	0.11	467	1.00	557	1.20	110	0.24	667	1.43
1941	362	0.77	46	0.10	408	0.86	598	1.27	162	0.34	760	1.61
1942	310	0.67	47	0.10	357	0.77	638	1.38	170	0.37	808	1.75
1943	325	0.72	53	0.12	378	0.83	595	1.31	151	0.33	746	1.64
1944	277	0.61	39	0.09	316	0.70	631	1.40	157	0.35	788	1.75
1945	286	0.63	32	0.07	318	0.70	579	1.28	156	0.35	735	1.63
1946	261	0.54	27	0.06	288	0.60	519	1.08	178	0.37	697	1.45
1947	305	0.62	37	0.08	342	0.70	518	1.05	133	0.27	651	1.32
1948	245	0.49	28	0.06	273	0.55	497	0.99	132	0.26	629	1.25

**Handling of Food, etc., by Infected Persons.**—It was not found necessary to exercise the powers conferred by Section 42 of the Leeds Corporation Act, 1930, during the year.

**Bronchitis.**—There was a decrease in deaths from this disease ; 415 as compared with 534 last year. The death-rates were 0·83 and 1·09 respectively.

**Diarrhœa and Enteritis.**—A substantial decrease in the number of deaths from this disease in children under two years of age falls to be recorded, 61 compared with 122 last year. The death-rates per 1,000 births were 6·61 and 11·22 respectively.

**Cancer.**—There were 959 deaths from this disease as compared with 947 last year and 960 in 1946. The corresponding death-rates per thousand of the population were 1·91, 1·92 and 1·99 respectively.

**Venereal Diseases.**—The number of deaths certified as due to syphilitic diseases was 39 which is equal to a death-rate of 0·08 per thousand of the population. The number of deaths in 1948 shows a decrease of six as compared with the previous year.

**Work of the Treatment Centre.**—Details of the number of new cases registered at the Treatment Centre at the Leeds General Infirmary from Leeds and the other contributory areas are given in the following table :—

PERSONS TREATED AT THE GENERAL INFIRMARY AT LEEDS  
(LOCAL TREATMENT CENTRE).

	Year 1947.		Year 1948.		Increase or decrease.	
	M.	F.	M.	F.	M.	F.
Syphilis .. first cases ..	473	308	280	225	-193	-83
Soft chancre .. ..	..	..	..	..	..	..
Gonorrhœa .. ..	586	177	357	128	-229	-49
Other diseases not Venereal ..	1,004	435	1,053	364	+ 49	-71
Total .. ..	2,063	920	1,690	717	-373	-203
Total attendances of all cases	58,749		48,689		-10,060	
Aggregate No. of In-patient days .. ..	2,003		1,491		- 512	

The number of cases ceasing to attend before completion of treatment or final test of cure was 393 or 6·8 per cent. of the total attending the Centre. The corresponding figure for 1947 was 470 or 7·5 per cent.

Details of new Leeds cases registered during the year are given in the following table :—

LEEDS PATIENTS.

	Year 1947		Year 1948		Increase or Decrease	
	M.	F.	M.	F.	M.	F.
Syphilis .. first cases ..	291	211	152	172	-139	-39
Soft chancre .. ..	..	..	..	..	..	..
Gonorrhœa .. ..	412	130	280	97	-132	-33
Other diseases, not venereal .. ..	644	350	829	284	+185	-66
Total .. ..	1,347	691	1,261	553	-86	-138
Total attendances of all cases	47,331		37,652		-9,679	
Aggregate No. of In-patient days .. ..	1,377		4,384		+3,007	

**Scabies.**—The number of cases of scabies notified voluntarily by medical practitioners during the year was 224. All were visited and arrangements made for their attendance, together with contacts, at St. James's Hospital, Sweet Street or Stanley Road Clinics.

The total number of cases ascertained from this and other sources was 1,095. In addition, 790 contacts and 54 re-infections were treated, a total of 1,939 persons.

The clinics at Sweet Street and St. James's Hospital were closed in May and August respectively and treatment is now concentrated at the Stanley Road Clinic.

The following table gives comparative figures since 1943 :—

SCABIES.

Year.	No. of cases notified by Medical Practitioners.	No. of cases treated (from notifications and other sources).	Total No. of treatments (including contacts and re-infestations).
1943 ..	1,645	8,285	12,743
1944 ..	1,515	6,815	11,494
1945 ..	1,432	6,614	10,801
1946 ..	1,406	5,354	9,480
1947 ..	604	2,019	4,057
1948 ..	224	1,095	1,939

It was not found necessary to take any case to Court during the year under the Public Health Act, 1936, or the Education Act, 1944.

**Vermin and Disinfection.**—See Sanitary Circumstances Report.

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**Maternity and Child Welfare.**

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## MATERNITY AND CHILD WELFARE SERVICES

BY

C. M. GRAY, M.B., Ch.B., D.P.H., *Assistant Medical Officer of Health for Maternity and Child Welfare.*

### NATIONAL HEALTH SERVICE ACT, 1946.

#### SECTION 22.—CARE OF MOTHERS AND YOUNG CHILDREN.

*Ante-Natal Clinics.*—On 31st December, 1947, there were 20 ante-natal clinics in use, and one additional clinic was opened during the year. Expectant mothers attending the clinics numbered 10,493, a decrease of 1,497 on the figure for 1947. Of the total 7,063, were new cases. The total attendances at all the ante-natal clinics was 37,491 as compared with 40,147 for 1947. A large number of those attending the clinics required to have their confinement in hospital either for obstetric reasons or on social grounds. Routine blood tests for Rhesus factors and Kahn reaction are now carried out in all cases booked for home confinement.

*Post-Natal Clinics.*—Since June, 1948, post-natal clinics have been held at ten of the Maternity and Child Welfare Centres for those mothers who were not attending hospital or a medical practitioner for post-natal examination. The importance of this examination is still not fully appreciated and attendances at the clinics have not been very satisfactory. The total attendance at all the clinics was 618.

*Infant Welfare Centres.*—There were 20 Infant Welfare Centres in use during the year and one additional Centre was opened.

*Attendances.*—The number of babies under one year attending infant clinics for the first time during 1948 was 6,322; between one and two years 389 and between two and five years 715. These figures show a decrease of 1,014 infants under one year and an increase of 53 children between one and five years. The total number on the register on 31st December, 1947, was 13,525. With 7,426 new children registered and 6,921 names removed of children who had reached the age of five years, defaulted or left the district, the total on 31st December, 1948, was 14,030.

There were 69 deaths of children between the ages of two weeks and one year who had attended the clinics as compared with 185 for the city; the corresponding infant mortality rates were 11 and 20.



*Food Supplements.*—National Dried Milk for infants, and Vitamin preparations for expectant and nursing mothers and children up to five years continued to be supplied at the Welfare Centres. The potential take-up of orange juice was 35.6 per cent., of cod liver oil 38.9 per cent., Vitamins A and D tablets 48.2 per cent. The comparative figures for 1947 were 41.5 per cent., 39.7 per cent. and 52.9 per cent.

*Consultative Infant Welfare Clinics.*—By arrangement with the Department of Pædiatrics and Child Health of the University, three consultative infant welfare clinics have been held each month since May, 1948. The total attendance of children under five years was 70.

*Orthopædic Clinic.*—A total of 161 children was seen by the Consultant at the clinic during the year, a decrease of 94 on the number for 1947. Six cases were recommended to the General Infirmary for treatment.

*Physiotherapy.*—The number of children who attended for remedial exercises was 644 and the total number of attendances made was 6,688, a decrease of 790 on the figure for 1947.

*Artificial Sunlight.*—This continued to be given at four infant welfare centres. The number of children who attended during the year was 987 and the total attendances was 18,849, an increase of 116 and 2,970 respectively on the numbers for 1947.

*Venereal Diseases.*—Expectant mothers requiring investigation or treatment continued to be referred to the special clinic at the Maternity Hospital. Routine blood tests in connection with adoptions were carried out at the Central Clinic on 35 mothers and 62 infants, as compared with 35 and 64 respectively for 1947.

*Dental Care.*—See report of Senior Dental Officer on page 43.

*Care of Premature Infants.*—Between 1st January and 31st December, 1948, there were 544 live births notified of babies born weighing  $5\frac{1}{2}$  lbs. or less at birth. Of these 442 were born in hospitals or nursing homes in the city and 102 were born at home. The number of those born at home who were removed to hospital was 16 and the remaining 86 were nursed at home.

The number of infants who died within 24 hours of birth was 53; of these 7 were born at home and 46 in hospitals or nursing homes. The number who died within one month was 37; of these 8 were born at home and 29 in hospitals or nursing homes.



For the care of premature babies nursed at home, the municipal midwives are able to borrow from the Department specially constructed cot-baskets fitted with draught-proof linings, in which pockets are made to hold hot water bottles and a thermometer.

Where a cot-basket with hot water bottles is not necessary, small electric pads are supplied which, by means of an adjustable switch, keep a constant temperature in the cot. These have proved invaluable, especially during the winter months and at the time of the coal shortage, in maintaining the premature baby's body heat, and have contributed largely to the successful care of these babies.

Pipettes and Belcroy Feeders for premature babies unable to breast feed are supplied by the Department. Recent acquisitions for premature babies who need oxygen are two Sparklet Resuscitators which can be sent immediately to the patient's house at the request of the midwife.

*Day Nurseries.*—The following table gives details of children admitted to the Day Nurseries during the year :—

DAY NURSERIES

Name of Nursery.	Accommodation	Average No. of beds occupied (weekly)	Total Number Attendances
Blenheim .. ..	50	42·8	12,027
Quarry Hill .. ..	35	31·3	8,725
East Street .. ..	35	32·4	9,083
Jack Lane .. ..	50	44·3	12,353
Burley Park .. ..	35*	49·2	13,774
Middleton .. ..	35	31·9	8,832
Meanwood .. ..	35	31·1	8,642
Rookwood .. ..	35	32·0	8,951
Armley .. ..	35	32·0	8,990
Low Road .. ..	35	32·2	8,961
Bramley .. ..	35	31·9	8,841
Sheepscar .. ..	35	31·6	8,781
York Road .. ..	50	43·6	12,075
Crossgates .. ..	50	43·7	12,287

\* Burley Park was extended to take 75 children on 7.6.48.

*Residential Nursery.*—The administration of the Residential Nursery continued to be carried out through the Health Department up to 31st December, 1948, when it was taken over by the Care of Children Committee.

The following table gives particulars of children admitted to the Residential Nursery during the year :—

#### RESIDENTIAL NURSERY

Name of Nursery.	Accommodation	Average No. of beds occupied (weekly)	Total Number Attendances
Spring Bank .. ..	60	49·4	18,072

*Wyther Hostel.*—On 31st December, 1947, there were 15 mothers and 17 babies in residence. During the year 57 mothers and 50 babies were admitted; of these 51 mothers were admitted for ante-natal care.

Of the 53 mothers discharged, 41 kept their babies and 12 babies were placed with a view to adoption. On 31st December, 1948, there were 19 mothers and 14 babies in the home.

**Eye Defects.**—*Children classified as Blind or Partially Blind.*—There were 5 children on the register on 1st January, 1948. During the year 3 children were notified as blind; one child was transferred to the Education Authority on reaching the age of 5 years, leaving 7 names on the register at the end of the year. Of these children two have been admitted to Sunshine Homes and two are awaiting admission.

**Convalescence.**—During the year 19 mothers and 19 babies and 14 mothers without children were referred for convalescence from Maternity and Child Welfare Centres.

**Almoning Committee.**—This Committee met on 25 occasions and considered 1,305 cases up to 5th July, 1948.

**Infant Life Protection.**—During the year a total of 380 visits was paid to foster children by Health Visitors and the Superintendent. This supervision was still being carried out provisionally by Health Visitors up to 31st December, 1948. Under the Children Act, 1948, it has been decided that the work would in future be undertaken by boarding-out staff of the Care of Children Committee.

The following table gives particulars of children nursed for reward during 1948 :—

INFANT LIFE PROTECTION.

PUBLIC HEALTH ACT, 1936. Part vii. Sec. 206-219.	
CHILDREN NURSED FOR HIRE OR REWARD DURING THE YEAR 1948.	
MOTHERS.	
Number of foster-mothers on the register at the beginning of the year .. .. .	32
Number of foster-mothers on the register at the end of the year .. .. .	51
Foster-mothers with one child .. .. .	47
Foster-mothers with two children .. .. .	4
CHILDREN.	
Number of children on the register at the beginning of the year .. .. .	46
Number of children placed on the register during 1948 .. .. .	37
Number of children who ceased, during the year, to come under the provision of this Act .. .. .	26
Number of children transferred to other foster mothers .. .. .	1
Number of children on the books at the end of the year .. .. .	57
DETAILS OF THE NUMBER OF CHILDREN WHO CEASED, DURING THE YEAR, TO COME UNDER THE PROVISIONS OF THE PUBLIC HEALTH ACT, 1936, AND OF THE CHILDREN ACT, 1948.	
Returned to parents or relatives.. .. .	12
Attained the age of 16 years .. .. .	..
Adopted without payment .. .. .	2
Sent to special homes, etc. .. .. .	2
Moved out of the district—no trace .. .. .	10
Died .. .. .	..
TOTAL .. .. .	26

**Adoption of Children (Regulation) Act, 1939.**—Children placed through the Health Department with a view to adoption during 1948 numbered 82. In 74 cases adoption was completed during the year. Of these 27 had been placed for adoption during 1947. The comparative figures for 1947 were 50 and 44.

The duties of the Local Authority under the above Act were still being carried out by the Health Department up to 31st December, 1948, but were shortly to be transferred to the Care of Children Committee under the Children Act, 1948.

**Nurseries and Child Minders Act, 1948.**—Under this Act application was made for registration of four premises as day nurseries and of 11 persons as child minders.

**SECTION 23.—MIDWIFERY.—Births.**—The number of births notified in the city during the year was 10,216. Of these 7,008 or 68·6 per cent. took place in hospitals or nursing homes in the city. In 1947 the percentage was 61·1.

The number of domiciliary births notified by midwives was 2,878 or 28·2 per cent. of the total births notified, as compared with 3,688 or 31·6 per cent. for the previous year.

*Number of Midwives.*—The number of midwives on the register on 31st December, 1947, was 156. During the year 25 new names were added, one midwife retired and 7 midwives left the district, leaving a total of 173 on the register on 31st December, 1948.

During the year 14 midwives notified their intention to practice as maternity nurses.

*Municipal Midwifery Services.*—During the first half of the year 35 Municipal Midwives were employed directly by the Authority. Since 5th July, six midwives, employed by the Maternity Hospital for the district training of medical students, have been transferred to the Authority.

The following table gives details of the work done by the Municipal Midwives :—

Ante-natal visits	..	..	..	..	21,870
Deliveries	{	Midwife	..	..	2,920
		Maternity Nurse	..	..	338
Post-natal visits	..	..	..	..	69,137
Bookings	{	Midwife	..	..	2,983
		Maternity Nurse	..	..	332
Attendances by patients	{	at Midwife's home..	..	..	9,743
		at Midwife's clinic..	..	..	2,802
Number of patients who had Gas/Air Analgesia					792
Number of Midwives	..	..	..	..	41

*Supervisor of Midwives.*—During the year the Municipal Midwives were interviewed at the Health Department once a week by the Lay Supervisor, who paid 215 routine visits of inspection to their homes with, in addition, 207 special visits.

*Part II Midwifery Training.*—On 31st December, 1947, there were 23 pupil midwives in training at the district training school at Red Court Hostel. During the year 46 completed training. Of these 43 passed the Part II examination of the Central Midwives Board, 2 failed to pass and one did not complete her training. On 31st December, 1948, there were 24 pupils in training.

*Maternity Outfits.*—These have been provided in all cases of domiciliary confinement where a midwife was booked to attend. Since July 5th, 1948, the outfit has been provided free of charge. Prior to that date the cost was included in the midwife's fee recovered from the patient.

Arrangements have also been made since July 5th for outfits to be supplied on application to domiciliary cases not booked with a municipal midwife. Between July 5th and December 31st, 1948, only two such applications were made.

*Analgesia.*—All Municipal Midwives are qualified to administer analgesia, for which 28 sets of apparatus are available. At the time she books the services of a municipal midwife, and subject to the production of a medical certificate of fitness, each expectant mother is offered the opportunity of receiving analgesia at her confinement. During the year 792 cases received this treatment.

*Medical Assistance.*—Notifications of having advised medical assistance were received in 1,350 domiciliary midwifery cases.

For attendance on emergencies under Section 14 of the Midwives Act, 1918, there were 1,056 claims made by general practitioners.

*Specialist Services.*—The number of claims from consultants for services rendered up to 5th July in connection with the Corporation's Maternity Scheme was 35.

**SECTION 24.—HEALTH VISITING.**—The coming into force of the National Health Service Act, 1946, increased the scope of the work of the Health Visitors. Prior to the "appointed day" her main concern was the visitation of expectant mothers and

mothers and babies, but now their work has been extended to embrace the care of the whole family and many visits have been paid to aged and sick persons. A special effort has been made for the Health Visitors to work in closer co-operation with hospital social workers and this has resulted in better supervision of sick children discharged from hospitals. There has also been much closer co-operation between general medical practitioners and Health Visitors.

Much time has been spent by the Health Visitors investigating bad, unsatisfactory and overcrowded homes.

The Health Visitors have also worked in close co-operation with the Mobile Immunisation Unit. They have gone out with the unit, called on the mothers in districts visited and encouraged them to bring their children to be immunised.

In the Clinics the work of the Health Visitors has increased, especially in the ante-natal clinics. The routine taking of blood specimens for the Rhesus factor involves extra work. The National Health Insurance forms, too, have had to be carefully explained to each expectant mother. The care of the unmarried mother has always been a big responsibility and often taxes the resources of the Maternity and Child Welfare Department. Post-natal and consultation clinics have meant extra staff.

During 1948 an effort has been made to combine the work of Health Visitors and School Nurses. Unfortunately, lack of qualified staff has hampered this, except on the Middleton Estate where it has been possible to arrange a very satisfactory routine. At this Centre there are three Health Visitors who attend the school medical clinics and inspections, and the infant, ante-natal and post-natal clinics. One Health Visitor in the clinic holding the Mothercraft Certificate has commenced a class for expectant mothers which is increasing in popularity.

Health Visitors are taking a growing part in the practical instruction of students. Medical, Social Science and Boarding-Out Visitor Students have accompanied Health Visitors on their districts in order to study social conditions.

The number of visits paid by the Health Visitors during 1948 amounted to 127,014. This is an increase of 16,302 on the total for 1947.



The following table gives details of the work done and visits paid :—

	VISITS.
Notified births including re-visits .. .. .	106,285
Stillbirths and deaths under one month including re-visits .. .. .	225
Investigations into the deaths of children from one month to five years .. .. .	328
Ophthalmia Neonatorum .. .. .	42
Expectant Mothers .. .. .	3,529
Special visits (Sick children from hospital, infectious diseases, children over 5 yrs. and Adults, etc.) ..	3,440
Infant Life protection .. .. .	380
Adoption of Children (Regulation) Act, 1939 :—	
Homes inspected .. .. .	162
Visits to children placed for adoption .. ..	428
Ineffectual visits .. .. .	12,195
Total visits for the year .. .. .	127,014

**Nurses Act, 1943, Part II.**—*Agencies for the supply of Nurses.*—Under this Act three nursing agencies applied for registration in January, 1948, and were issued with licences.

**Registered Nursing Homes.**—The following table gives details of registered nursing homes in the city :—

REGISTERED NURSING HOMES IN THE CITY.

	Maternity		Maternity and General.			General.		Total.		
	Homes.	Beds.	Homes.	Beds.		Homes.	Beds.	Homes.	Beds.	
				Mat'y.	Gen.				Mat'y.	Gen.
On register, 31st Dec., 1947 ..	8	94	4	30	17	8	134	20	124	151
Registered during 1948 .. ..	2	3	..	..	..	..	..	2	3	..
Registration cancelled or surrendered during 1948 ..	2	5	..	..	..	..	..	2	5	..
On register 31st Dec., 1948 ..	8	92	4	30	17	8	134	20	122	151

## DENTAL CARE OF MOTHERS AND YOUNG CHILDREN

BY

D. E. TAYLOR, L.D.S.

*Senior Dental Officer.*

Prior to July 5th, 1948, one full-time dental officer was employed at Park Square Clinic for the dental treatment of Maternity and Child Welfare cases. No routine inspection was carried out, patients being referred from the Infant Welfare Centres.

On July 5th a scheme was introduced whereby all new admissions to the ante-natal register were given the opportunity of having a dental inspection and treatment if they wished to take advantage of the priority dental service. The inspections were carried out at the Infant Welfare Centres as it was thought that there would be a better attendance if the mothers were in premises already familiar to them. As the figures show, only those who intended to accept treatment presented themselves for inspection, with the result that a good deal of the officer's time was wasted. It has now been decided to hold the inspections in the dental clinics so that in the event of a poor attendance the dental officer can continue with the routine work. The names of those who do not attend are forwarded to the Senior Medical Officer for Maternity and Child Welfare so that it can be ascertained whether they are having treatment elsewhere.

In all cases full treatment is offered to the mothers but in many cases only urgent treatment is given before confinement, the work being completed during the nursing period. Whilst full treatment is not insisted upon, the majority have accepted it willingly and the following table gives some indication of the attendances for different types of treatment.

Type of appointment	% of appointments kept
Filling .. ..	65·1
Extraction .. ..	74·3
Scaling .. ..	76·6
Denture .. ..	86·4

In October, 1948, the laboratory at the Education Offices was extended, a technician and an apprentice were appointed and all new denture work was done on the premises. By the end of the year the previous practise of sending denture work to outside laboratories was discontinued.

In the clinics adult chairs were installed where the existing chairs were unsuitable for the mothers.

The system of book-keeping has been adapted to the new conditions and a weekly return is made by each dental officer thus providing, at any time, a survey of the work that is being done.

It was intended to have routine inspection and treatment at the Day Nurseries as an introduction to a pre-school service, but, owing to the shortage of staff, this scheme had to be abandoned. At present treatment is given to any of these children who present themselves at the dental clinics on the sessions set aside for urgent treatment.

Professor T. Talmage Read, Professor of Clinical Dental Surgery at Leeds University, has offered his services in any research in connection with the priority dental service but no definite field has yet been decided.

In conclusion, the foundation of a satisfactory priority service has been laid. Whilst minor alterations to the scheme may be necessary, with the addition of more officers in the future it will be possible to fulfil the requirements of the National Health Service Act and provide a really efficient service for the mothers and pre-school children of Leeds.

SUMMARY OF DENTAL TREATMENT PROVIDED FOR EXPECTANT  
AND NURSING MOTHERS AND YOUNG CHILDREN.  
(JULY 5th TO DECEMBER 31st, 1948).

No. of inspection invitations .. .. .	3,304
No. of inspection attendances .. .. .	1,391
No. found dentally fit .. .. .	139
No. accepted treatment .. .. .	1,235
No. refused treatment .. .. .	17
Total No. of teeth filled .. .. .	752
Type of filling given :—	
Synthetic porcelain .. .. .	200
Cement .. .. .	10
Amalgam .. .. .	201
Lined Amalgam .. .. .	421
Total fillings given .. .. .	832
Total No. of teeth extracted .. .. .	2,133
" " " dentures fitted .. .. .	321
" " " scalings .. .. .	323
" " " other treatments .. .. .	195
" " " local anæsthetics .. .. .	346
" " " general anæsthetics .. .. .	362
" " " treatment sessions .. .. .	427
" " " inspection sessions .. .. .	73

PERCENTAGE ATTENDANCE TABLE.

	Invitations	Attendances	% Attendance
Filling .. ..	938	611	65.1
Extraction .. ..	809	601	74.3
Scaling .. ..	321	246	76.6
Other Treatment .. ..	270	259	95.9
Dentures .. ..	1,024	885	86.4
Attended but not treated ..	..	101	..
Total .. ..	3,362	2,703	81.5

## SECTION (i)—NUMBER OF ATTENDANCES FOR TREATMENT.

	Number of Attendances				
	Extrac- tions	Fillings	Dentures	Scaling	Other T.T.
Nursing Mothers :—					
Jan. 1st to July 3rd ..	207	90	651	30	66
July 5th to Dec. 31st ..	94	68	710	27	46
Expectant Mothers :—					
Jan. 1st to July 3rd ..	410	142	27	48	24
July 5th to Dec. 31st ..	510	539	243	218	59
Children under 5 years :—					
Jan. 1st to July 3rd ..	63	2	..	..	8
July 5th to Dec. 31st ..	57	7	..	1	2
Totals .. ..	1,341	848	1,631	324	205

## SECTION (ii)—DENTAL WORK.

	Number examined	Number found to need treatment	Number treated	Number made dentally fit
Nursing Mothers :—				
Jan. 1st to July 3rd ..	224	224	1,045	175
July 5th to Dec. 31st ..	..	..	15	..
Expectant Mothers :—				
Jan. 1st to July 3rd ..	321	320	694	57
July 5th to Dec. 31st ..	1,391	1,235	2,660	442
Children under 5 years :—				
Jan. 1st to July 3rd ..	63	63	76	6
July 5th to Dec. 31st ..	41	41	100	4
Totals .. ..	2,040	1,883	4,590	684



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## Mental Health Services.

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**Co-ordination with other Bodies.**—Co-operation has been achieved between the Department, Hospital Management Committees and the Regional Hospital Board. Joint use of officers occurs by arrangement with the Board and St. James's Hospital Management Committee. The Assistant Medical Officer of Health for Mental Health Services (Psychiatrist) acts as Physician in charge of the Psychiatric and Mental Observation Wards at St. James's Hospital—a most useful link—and the Psychiatric Social Worker and Mental Health Workers contribute to the social investigations of the patients in these wards. Liaisons have been created with Social Workers in Mental Hospitals. The Mental Health Workers of the Local Health Authority have continued the visitation and supervision of patients on licence from institutions. The Medical Superintendents of Menston and Wakefield Mental Hospitals and Meanwood Park Colony for defectives have been appointed Consultants to the City Mental Health Services. The Professor of Psychiatry at the University of Leeds and the Regional Psychiatrist have been appointed Consultant Advisers. The Assistant Medical Officer of Health for Mental Health Services (Psychiatrist) and the Executive Officer serve on the Mental Health Technical Advisory Committee of the Board.

**Voluntary Association.**—The Leeds Voluntary Mental Welfare Committee, the members of which organisation previously undertook the visitation of mental defectives, was dissolved in September, 1948. The duties are now carried out by the staff of the Local Health Authority.

The Committee was constituted in 1914 and for many years did pioneer work in the visitation and care of mental defectives living under supervision. It was largely due to that Committee's efforts in organising flag days and voluntary appeals that Occupation Centres were established. The Health Committee are greatly indebted to the members and visitors of the Association for their untiring efforts during the past thirty-five years, and places on record this appreciation of its valuable pioneer work.

**Training of Staff.**—A Course at Leeds University was organised by the National Association for Mental Health and arrangements were made for Mental Health Workers and Authorised Officers to attend. The Chief Officers have given lectures and technical advice as part of office routine.

The Department has contributed to the training of students undertaking courses in the Social Science Department at Leeds University. Four students from these courses attended Occupation Centres and carried out home visits to defectives under the supervision of Mental Health workers and have become familiar with the scope of the Department's activities and the duties of its officers.

Four other students received training at an Occupation Centre as part of a Course arranged by the National Association for Mental Health. Occupation Centres have also been visited by larger groups of students from Nursery Nursing Courses under Leeds and West Riding Health Departments, Student Health Visitors in training at Leeds University, students from the Yorkshire College of Housecraft and from the National Association of Mental Health Course for Authorised Officers.

#### WORK UNDERTAKEN IN THE COMMUNITY.

**Prevention, Care and After Care, National Health Service Act, 1946.—Sec. 28.—*Prevention.***—The Committee took part in the December Health Exhibition in the Art Gallery, Leeds. Charts and other exhibits were displayed in which the factors contributing to mental health and mental illness were demonstrated to the public.

Child Guidance and Child Psychiatry in Leeds is undertaken by the Education Committee in conjunction with the Department of Psychiatry at Leeds University. Appropriate cases have been referred to this Service when they have come to the notice of the staff of the Mental Health Services. It is hoped that it may be possible to create a closer liaison between the Mental Health Services Department and the Maternity and Child Welfare Services when staff is available.

The Committee have discussed the value of Marriage Guidance in the light of the Denning and Harris Reports on the subject and it is anticipated that financial support may be provided for the Leeds Marriage Guidance Council for agreed purposes.

**Care.**—In addition to the duties of ascertainment and statutory visitation, the Psychiatrist is able to advise parents and guardians when referred to him by the Mental Health Workers on problems arising from day to day in the management of defectives.

A week's camping holiday was provided for fifty boys at Redcar in June and fifteen girls had a holiday at Bridlington in the same month.

The Psychiatrist has seen cases referred for advice by the Probation Officer, the local Ministry of Labour Industrial Rehabilitation Unit and the Leeds Council of Social Service. Some such cases are in need of the psychiatric services provided by the Regional Hospital Board but other consultations are for vocational or occupational guidance, marriage guidance, etc.

The Authorised Officers are called to visit twice as many cases as they require to bring before the Justices and in the course of their duties they give advice to patients and their families about the other social agencies providing services which may be of value in relieving tense family situations.

*After Care.*—After care is provided for all patients notified on discharge from Mental Hospitals and returning to live in Leeds. This includes patients discharged from the Mental Observation Wards of St. James's Hospital and those notified through the Regional Hospital Board on leaving Military Mental Hospitals. Initial visits are undertaken by the Psychiatric Social Worker or by a Mental Health Worker, at which the patient's desire for after care is ascertained and his situation assessed. Subsequent action is taken after discussion with the Psychiatric Social Worker, and, if necessary, the Psychiatrist. It is estimated that approximately 450 such cases will be dealt with each year. The appointment as Consultants to the City Mental Health Services, of the Medical Superintendents of the Mental Hospitals from which the majority of the patients are discharged, aims to consolidate the liaison with the hospitals. The following work was done in After Care between 5th July and 31st December, 1948 :—

	Visits paid
Introductory Home Visits .. .. .	72
Patients seen more than once within the same month ..	55
Follow-up from previous months .. .. .	101

It is hoped to provide social club facilities, including handicrafts, for these patients early in 1949 and that a closer liaison will be obtained with the Ministry of Labour Industrial Rehabilitation Unit.

**Lunacy and Mental Treatment Acts, 1890-1930.**—Statistics relating to cases dealt with by the Authorised Officers are presented in the following table :—

CASES DEALT WITH BY AUTHORISED OFFICERS,  
5th JULY TO 31st DECEMBER, 1948.

	Males	Females	Total
1. Visits paid .. .. .	177	316	493
2. Removed to St. James's Hospital under Section 20 of the Lunacy Act, 1890 ..	117	169	286
3. Certified patients transferred to Menston Hospital .. .. .	42	48	90
4. Certified patients transferred to Stanley Royd Hospital, Wakefield .. ..	..	23	23
5. Certified patients transferred to Storthes Hall Hospital .. .. .	..	1	1
6. Certified patients transferred to other Mental Hospitals .. .. .	7	6	13
7. Direct admissions to Mental Hospitals (certified) .. .. .	..	4	4
8. Total Mental Hospital admissions on Summary Reception Orders or Petition	49	82	131
9. Voluntary patients admitted to Mental Hospitals direct .. .. .	5	12	17
10. Voluntary patients admitted to Mental Hospitals on transfer from St. James's Hospital .. .. .	3	17	20
11. Total voluntary patients .. .. .	8	29	37
12. Temporary patients admitted to Mental Hospitals (all via St. James's Hospital)	..	2	2
13. Total admissions to Mental Hospitals (Total of Items 8, 11 and 12) .. ..	57	113	170

Thus, of 286 persons admitted to Mental Observation Wards (under Section 20 of the Lunacy Act), 170 were transferred to Mental Hospitals. Of the remainder the great majority were discharged to their homes on the authority of the Magistrate within 17 days—a procedure which is in many cases more practicable if social workers are available. A few cases who suffered from senile confusional disorders died in Hospital and several others were transferred to the Geriatric Wards.

It is regretted that the officers have to inform patients and their relatives that there are very few vacancies for voluntary patients owing to staffing difficulties in the Hospitals.



**Mental Deficiency Acts, 1913-1938.**—Particulars with regard to “ascertainment” are contained in the following table :—

**PARTICULARS OF MENTAL DEFECTIVES ASCERTAINED DURING 1948.**

	Males	Females	Total
1. Ascertainment.			
(a) Cases reported by Local Education Authority (Section 57, Education Act, 1944) :—			
(i) Under Sec. 57(3) (ineducable) ..	28	15	43
(ii) Under Sec. 57(5) (at 15 years) ..	16	10	26
(b) Other cases reported during 1948 and ascertained to be “subject to be dealt with” .. .. .	12	11	23
Total cases ascertained to be “subject to be dealt with” during the year ..	56	36	92
(c) Other cases reported during 1948 who are not at present “subject to be dealt with” but for whom the Local Health Authority may subsequently become liable .. .. .	13	9	22
Total number of cases reported during the year .. .. .	69	45	114
2. Disposal of cases reported during the year.			
(a) Cases ascertained to be “subject to be dealt with” :—			
(i) Admitted to Institutions (by Order) .. .. .	5	2	7
(ii) Placed under Guardianship (by Order) .. .. .	..	..	..
(iii) Taken to “Places of Safety” ..	9	7	16
(iv) Placed under Statutory Supervision .. .. .	42	27	69
(b) Cases not at present “subject to be dealt with” :—			
(i) Placed under Voluntary Supervision .. .. .	12	5	17
(ii) Action not yet taken .. .. .	1	4	5
Totals .. .. .	69	45	114

**PARTICULARS OF LEEDS MENTAL DEFECTIVES ON 1ST JANUARY, 1949.**

	Males	Females	Total
1. “Subject to be dealt with” :—			
(a) In certified Institutions .. ..	442	437	879
(b) Under Guardianship .. .. .	13	23	36
(c) In “Places of Safety” .. .. .	12	20	32
(d) Under Statutory Supervision* ..	400	377	777
2. Certified defectives but not yet “subject to be dealt with” :—			
Under Voluntary Supervision .. ..	59	40	99
Other cases .. .. .	1	4	5
Totals .. .. .	927	901	1,828

\* Of this number 26 males and 37 females were awaiting vacancies in institutions.



**Guardianship.**—All cases under guardianship have been visited regularly by Mental Health Workers and every case has been seen since 5th July by the Psychiatrist who has made an entry in the book prescribed under the new Regulations. Guardians have been suitably advised with regard to maintenance grants under the Assistance Act. They have been also advised as to the selection of a medical practitioner and dentist under the National Health Service Act, and clothing and other assistance has been given to necessitous cases.

**Supervision.**—The patients under supervision have been visited quarterly by Mental Health Workers, but monthly or more frequently in some instances. Special cases have been seen by the Medical Officer who is endeavouring gradually to see every case under supervision.

Recommendations for removal of defectives from supervision are made from time-to-time when they are found to be stable in character and temperament, and have proved their social capacity.

**Occupation Centres.**—Training and occupation is continued at the four Occupation Centres and the numbers on the roll are shown in the following table :—

	Males	Females	Total
No. of mental defectives receiving training :			
(a) In Day Training Centres :			
Under 16 years .. .. .	90	80	170
16 years and over .. .. .	31	30	61
(b) At home .. .. .	1	..	1
Totals .. .. .	122	110	232

The Occupation Centre at North Leeds for older boys is being re-organised and an additional handicraft instructor has been appointed.

The children in all the Centres are graded into classes according to their ability. The syllabus includes handwork, speech training, percussion band and singing, art, physical training, dancing and outdoor and indoor organised games, with habit and domestic training for older pupils. Every child has the advantage of regular medical and dental inspection and treatment. A mid-day dinner is cooked on the premises and milk is provided daily. The two Centres at East and West Leeds are open from 9.30 a.m. to 3.30 p.m. daily except Saturday and the usual school holidays are allowed.

The South Leeds Centre provides employment for 25 relatively low grade girls who are fit for laundry work under sheltered conditions. Work is undertaken for several other Corporation Departments. The laundry works 44 hours per week. It is hoped to extend this Centre to include other occupations.

Open days are arranged twice a year when parents are given an opportunity of seeing their children at work. At East Leeds Occupation Centre there is an active Parents' Association which holds monthly meetings. This provides a useful means whereby the staff obtain insight into the difficulties of the parents and children, and opportunity is taken to advise the parents on the management of the day-to-day problems of defective children.

A very popular evening club is held for former pupils in Armley Grange Centre once weekly. Here 26 girls have music, games, dancing and needlework ; refreshments are provided.

The Ministry of Health have, during the year, approved plans for additional classrooms and alterations at the East Leeds Occupation Centre at an estimated cost of £4,000. Land has also been purchased west of the city with a view to building, when the time is opportune, a new occupation centre to replace the existing one at Armley Grange. It is hoped at this centre to make special provision for spastic cases.

### **AMBULANCE SERVICES.**

The conveyance and removal of persons suffering from mental illness has been carried out by ambulances and private cars supplied from the Local Health Authority Central Ambulance Station, set up pursuant to Section 27 of the National Health Service Act. This Service has also been used for the conveyance to and from Occupation Centres of mentally defective children, who, by reason of physical disability or long distance, could not attend the Centres by ordinary public transport.

### **CONCLUSION.**

The Committee is seriously concerned about the difficulty experienced in finding Colony and institutional accommodation for defectives whose behaviour, or circumstances make removal to hospital an urgency. Delay of months or even years takes place in the case of low grade cases and females between the request for admission and the provision of vacancies. Once more the position arises by staffing difficulties in the hospitals. The effect is directly felt by the staff of this Department who must explain the unsatisfactory position to the hard-pressed parents or guardians.

It seems desirable to summarise the administrative arrangements which have been provided since 5th July, 1948, in an attempt to provide a unified and comprehensive mental health service. Most patients are admitted either on the order of the Authorised Officer or as voluntary patients to St. James's Hospital Mental Observation Wards, to which some defectives are also admitted on Place of Safety Orders. They are examined there by the Psychiatrist from the Mental Health Services Department who acts as Visiting Psychiatrist to these wards. Social investigations are undertaken at this stage by the Department's Psychiatric Social and Mental Health Workers. Many patients are subsequently transferred to Mental Hospitals, but approximately 33 per cent. are discharged to their homes. In the investigation and treatment of these patients the Psychiatrist has the valuable advice and assistance of the staff of the Department of Psychiatry at Leeds University. It is convenient that the after care required on discharge from these wards, or from the Mental Hospitals at a later date, is undertaken by the same Social Workers who have already made contact with the patients at an earlier stage in their illness and who have ready access to the Psychiatrist.

It is hoped that this integration of the mental health services will be continued and extended.

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# National Health Service Act 1946

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Section 25 HOME NURSING

Section 26 VACCINATION AND DIPHTHERIA IMMUNISATION

Section 27 AMBULANCE SERVICE

Section 28 PREVENTION, CARE AND AFTER-CARE

Section 29 DOMESTIC HELP

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## SECTION 25

## HOME NURSING.

*Miss E. G. Meadows, Supervisor of Home Nursing, reports as follows:—*Prior to 5th July, 1948, the Home Nursing Services in Leeds were provided voluntarily by the following District Nursing Associations; Leeds, Hunslet, Bramley, Holbeck, Crossgates, Whitkirk and Kirkstall. Five of these Associations provided residence for nurses.

The nursing staff consisted of 3 superintendents, 17 resident full-time nurses, 5 non-resident and 15 part-time nurses.

In accordance with the Local Health Authority's proposals under the National Health Service Act, 1946, a Joint Nursing Committee was set up, consisting of representatives of the District Nursing Associations and the Local Health Authority. From the "appointed day" this Committee has been responsible, as agent of the Local Health Authority, for the provision of home nursing services in the city.

## NURSING REPORT

Number of cases being nursed on 5th July, 1948 ..	620
Total number of cases nursed from 5th July to 31st December, 1948 .. .. .	3,954
Total number of visits paid to above from 5th July to 31st December, 1948 .. .. .	74,914

*Nursing Requisites.*—The Home Nurses are co-operating in the Local Health Authority's arrangements under Section 28 in supplying on loan equipment necessary for the satisfactory nursing of patients.

*Future Developments.*—During the half year since the "appointed day" no major changes have been made and demands on the Service did not greatly increase.

It has, however, become clear that the existing district nursing areas are too large. The needs of the public would be better met were the Service organised on lines similar to the Local Health Authority's Home Midwifery Service. This would entail dividing large district nursing areas into small neighbourhood areas each with its own resident home nurse. Each neighbourhood area should, of course, be centred on a Health Centre. It is clear that a change of this kind must be gradual and will require careful planning.

During the year, 1,597 Maternity and Child Welfare cases were referred to the Leeds District Nursing Association.

## SECTION 26

### VACCINATION AND DIPHTHERIA IMMUNISATION

*Dr. G. R. Baxter, Assistant Medical Officer of Health for Immunisation, reports :—*

Prior to the "appointed day" (5th July, 1948), all general practitioners in the city were invited to take part in the Local Authority's arrangements under Section 26 for vaccination against smallpox and immunisation against diphtheria. Doctors taking part in the arrangements provide vaccination and immunisation free of charge to any of their patients desiring it. Payments to doctors doing this work are to be made by the Local Health Authority on the return of the completed record cards. The fees to be paid have not yet been fixed by the Minister of Health. The majority of the doctors in the city have intimated their intention of taking part in the scheme.

On the "appointed day" the Vaccination Acts ceased to have effect and the compulsory vaccination of infants against smallpox, and the functions and appointments of Public Vaccinators and Vaccination Officers, came to an end. Vaccination is now voluntary and the work is undertaken by general practitioners taking part in the Local Authority's arrangements and at special vaccination sessions held each week at the Central Clinic in Park Square.

*Vaccination.*—Numbers of vaccinations and re-vaccinations performed during the periods 1st January to 4th July and 5th July to 31st December, 1948, are shown in the following table :—

1948	Primary Vaccinations	Re-vaccinations
1st January to 4th July ..	2,860	122
5th July to 31st December ..	1,035	261
Total for year ..	3,895	383

During 1947, the last year for which statistics are available, 7,148 children, or 62·7 per cent. of the total births, were successfully vaccinated.



Comparative figures for the ten preceding years are as follows :—

1946	..	..	..	..	60.6%
1945	..	..	..	..	56.2%
1944	..	..	..	..	54.8%
1943	..	..	..	..	54.9%
1942	..	..	..	..	54.4%
1941	..	..	..	..	50.6%
1940	..	..	..	..	45.1%
1939	..	..	..	..	41.5%
1938	..	..	..	..	45.6%
1937	..	..	..	..	44.8%

*Diphtheria Immunisation.*—During the year, 10,285 children under 15 years of age were immunised against diphtheria compared with 8,730 last year. Of this total, 9,578 immunisations were carried out by Medical Officers of this Department and the remaining 707 by private practitioners to whom material was supplied free of charge.

In addition, 7,637 “refresher” doses were given to children under 15 years of age as compared with 8,114 last year. Schick tests numbering 2,238 were also given to children under 15 years of age and 152 to persons aged 15 years and over.

On 31st December, 1948, it was estimated that 64.6 per cent. of children under five years of age (73.0 per cent. between the ages of one and five) and 92.7 per cent. between the ages of five and fifteen years in the city had been immunised against diphtheria. It is calculated that of children of all ages up to fifteen years 81.7 per cent. have been immunised.

The mobile clinic was again used during the summer months for the benefit of those living in outlying districts, or where parents were unable to take their children to the regular clinics or defaulted before immunisation was complete. This service is proving of great value and was responsible for the immunisation of 1,413 children who would otherwise not have been immunised.

The table on page 61 illustrates the progress of the immunisation scheme since its inception.

# DIPHTHERIA IMMUNISATION.

Illustrating the progress of the Immunisation Scheme since its inception.  
Number of Persons in Age Groups, having had Full Course of Injections.

Age at date of Inoculation	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	Total.
Under 1 year ..	15	35	30	34	79	25	56	383	102	68	210	38	75	24	..	..	..	..	..	788	3,127	Total
1-2 years ..	33	33	31	45	156	28	163	820	200	245	820	215	411	941	3,080	3,990	4,412	5,110	5,137	5,304	4,923	under 5 years
2-3 " ..	17	15	7	30	169	45	171	937	114	177	788	116	173	814	2,292	1,024	409	240	777	418	455	at end of 1948
3-4 " ..	13	9	13	37	161	66	184	1,188	117	92	1,008	96	121	943	2,053	1,063	463	220	557	327	220	26,846
4-5 " ..	11	10	6	28	152	75	204	1,638	114	79	1,241	64	62	865	1,940	1,043	381	257	463	288	260	
5-6 " ..	2	2	5	25	209	148	202	2,337	163	72	1,752	46	30	1,563	1,486	1,667	451	359	556	366	323	
6-7 " ..	2	1	5	17	248	183	236	2,522	86	53	1,818	12	10	1,450	940	1,622	302	233	467	296	229	Total
7-8 " ..	..	..	7	26	106	58	184	2,546	54	27	1,239	7	6	1,174	676	1,482	197	185	392	225	165	5-10 years
8-9 " ..	..	..	11	22	54	18	166	2,606	30	7	571	13	6	979	466	1,357	164	188	275	153	126	29,919
9-10 " ..	..	..	11	11	45	18	172	2,647	27	9	396	6	3	926	325	1,271	157	142	259	142	110	
10-11 " ..	..	..	15	9	53	16	132	2,955	28	14	317	19	4	892	252	1,197	130	152	250	100	90	
11-12 " ..	..	..	5	10	30	8	160	2,846	30	7	287	17	4	921	205	1,089	109	128	249	113	67	Total
12-13 " ..	..	..	4	6	27	10	122	2,930	30	7	212	19	5	839	193	1,193	96	109	185	97	80	10-15 years
13-14 " ..	..	..	8	4	10	8	89	2,673	54	5	154	32	7	704	175	1,035	78	79	188	100	61	30,021
14-15 " ..	..	..	7	4	1	4	53	475	83	..	17	20	..	74	148	382	8	29	34	13	49	
15 years and over	..	..	8	7	7	2	107	408	696	144	25	174	37	65	..	..	55	79	83	43	53	Total 15 years & over 55,878
Age not known	1	2	6	3	17	14	51	151	9	129	317	..	213	34	..	..	11	..	..	..	..	age not known 958
TOTALS ..	94	107	179	318	1,524	726	2,452	30,062	1,937	1,135	11,172	894	1,167	13,208	15,101	19,415	7,483	7,510	9,822	8,773	10,338	143,417

*Diphtheria in the Inoculated.*—Of the 143,417 persons immunised since 1928, ten developed clinical diphtheria of a mild type during the year. All recovered.

In response to many requests from general practitioners for the combined diphtheria and whooping cough prophylactic, the Department supplied this material free of charge as from August 1st.

*Special Inoculations.*—During the year 359 persons going abroad and requiring inoculations against one or more of the diseases shown below, attended the Central Immunisation Clinic in Park Square and received inoculations as follows:—

Smallpox	..	..	..	83
Typhoid Fever	..	..	..	171
Typhus Fever	..	..	..	43
Tetanus	..	..	..	9
Cholera	..	..	..	173
Plague	..	..	..	6

*Whooping Cough Immunisation.*—The whooping cough trial immunisation scheme was continued during the year and a further 908 children were inoculated. These children, together with the 975 inoculated in 1947, are being followed up by regular five-weekly visits for a period of two years. In addition special visits are made to children reported with suspicious coughs and to contacts with known cases of whooping cough.

Considerable advance has been made in the early diagnosis of whooping cough by means of the per-nasal pharyngeal (throat) swab.

In 111 cases complement fixation tests were carried out. Although the evaluation of the vaccine must await the conclusion of the trial, the results of the complement fixation tests and the clinical findings are encouraging.

The first group of children inoculated in 1947 will have been under observation for two years at August, 1949.

## SECTION 27

## AMBULANCE SERVICE

*Mr. F. E. J. Large, Supervisor, reports :—*

The table appended shows the work carried out by the Municipal Ambulance Service during the year :—

Type of Case	Number	Mileage
By ambulance :—		
Accidents (Emergency Calls) .. .. .	1,894	} 231,152
Illness .. .. .	1,023	
Maternity .. .. .	4,033	
Tuberculosis .. .. .	367	
Admissions and discharges .. .. .	9,738	
Infectious diseases .. .. .	1,577	
Welfare Services .. .. .	151	
Lunacy .. .. .	36	
Mental .. .. .	153	
Special Treatment .. .. .	9,657	
Emergency Medical Service .. .. .	4	
Others (incl 657 fruitless journeys) .. .. .	4,060	
	32,693	231,152
By car :—		
Treatments, Midwives, etc. .. .. .	40,143	286,811
Mortuary Service—Bodies .. .. .	533	3,475
Total .. .. .	73,369	521,438

The following table gives a summary of the cases removed and the mileage covered by ambulances and cars during the year. The figures for 1946 and 1947 are given for comparison :—

	1946	1947	1948
Cases :—			
Ambulance .. .. .	19,196	22,760	32,693
Car .. .. .	5,942	11,657	40,143
Total .. .. .	25,138	34,417	72,836
Mileage :—			
Ambulance .. .. .	144,311	148,739	231,152
Car .. .. .	54,572	91,989	286,811
Total .. .. .	198,883	240,728	517,963

The following table shows the number of cases removed during the two six-month periods January to June and July to December, 1948, and indicates the increased volume of work consequent to the coming into operation of the National Health Service Act, 1946 :—

	Jan.-June	July-Dec.	Increase
Cases :—			
Ambulance .. .. .	13,962	18,731	4,769 (34%)
Car .. .. .	10,615	29,528	18,913 (178%)
Total .. .. .	24,577	48,259	23,682 (96%)
Mileage :—			
Ambulance .. .. .	96,978	134,174	37,196 (38%)
Car .. .. .	70,811	216,000	145,189 (205%)
Total .. .. .	167,789	350,174	182,385 (109%)

## CASES PER MONTH

1946 .. .. .	2,289 (Average)
1947 .. .. .	2,855 „
1948 :	
January to June .. .. .	4,141 „
July .. .. .	6,477
August .. .. .	6,408
September .. .. .	7,682
October .. .. .	8,901
November .. .. .	8,970
December .. .. .	10,087

From the 1st September, 1937, when the Service was inaugurated, to the 31st December, 1948, the vehicles have carried 258,425 cases and covered 1,809,380 miles as shown in the following table :—

PERIOD	CASES	MILEAGE
1st Sept. to 31st Dec., 1937 ..	4,944	31,951
1938 .. .. .	14,837	92,904
1939 .. .. .	14,020	91,286
1940 .. .. .	15,271	106,561
1941 .. .. .	15,359	102,149
1942 .. .. .	14,518	94,190
1943 .. .. .	15,034	95,678
1944 .. .. .	14,399	104,252
1945 .. .. .	16,951	128,294
1946 .. .. .	25,138	198,883
1947 .. .. .	34,595	241,794
1948 .. .. .	73,369	521,438
Totals .. .. .	258,425	1,809,380

**Staff.**—The total staff of the Department is 90. All members of the ambulance staff are qualified as set out below :—

Midwives (State Certified)	..	..	8
State Enrolled Assistant Nurses	..	..	4
Female Ambulance Attendants			
(First Aid and Home Nursing)	..	..	5.
Ambulance Drivers (First Aid)	..	..	61

**Vehicular Strength.**—*Ambulances.*—During the year two of the older ambulances were disposed of and two converted for the conveyance of bodies to the mortuary. It has not been possible to build the Service up to full strength despite the fact that four new ambulances have been received. The number of ambulances in service at the end of the year was 22, some of which require replacing.

*Sitting-Case Cars.*—Great difficulty was experienced in dealing with the number of car (sitting) cases although the fleet of cars has been increased from 4 to 15. An additional eight vehicles are required. In this connection it was necessary to call in the services of private hire cars on 1,050 occasions at a cost to the Department of £1,207 19s. 6d.

*Hospital Car Pool.*—Without the assistance of this service, it would have been impossible to cope with the demand for sitting-case cars. From July 5th to December 31st, 1948, this Service dealt with 12,593 cases, covering 93,363 miles at a cost of £2,334.

*Mortuary Service.*—This Service worked very satisfactorily during the year with the full co-operation of the Police Authorities. The number of bodies removed was 533.

*Mobile Medical Unit.*—This unit was used by the Immunisation Section on 63 occasions covering 1,074 miles.

*Fruitless Journeys.*—During the year there were 657 fruitless journeys, a considerable loss in time, mileage and petrol. Some were unavoidable, but closer co-operation between hospitals and medical practitioners might reduce the figure.

*Accidents.*—During the year accidents to service vehicles numbered 37, involving 27 drivers, an average of one accident per 14,100 miles. The majority of the accidents were trivial.

*Accommodation.*—The garage accommodation provided is inadequate to house all vehicles and additional accommodation is needed. The administrative staff also urgently require extra accommodation.



## SECTION 28.

### HEALTH EDUCATION AND PUBLICITY

**Leeds Committee for Social Hygiene and Health Publicity.**—The following held office during the year :—Chairman, Dr. J. H. E. Moore ; Vice-Chairmen, Councillors D. Murphy, J.P., and Mrs. A. M. M. Happold ; Honorary Secretaries, Dr. I. G. Davies and Dr. D. B. Bradshaw ; Honorary Treasurer, Mr. R. H. Franklin.

*Membership.*—The Committee as at present constituted comprises 20 members nominated by various interested organisations, 10 co-opted members and 4 ex-officio members.

**Local Activities.**—The year has not been a favourable one for the Committee's activities. The National Health Service Act and legislation affecting various social services introduced extensive changes in the field in which the Committee works. Planning of new activities must be cautious in a period of transition, for the effects of major changes in the legislation are not at first fully apparent. It is, however, clear that health education is destined to become increasingly important in future years.

*Posters, Leaflets, etc.*—Copies of all posters and leaflets issued by the Central Council for Health Education have been received and where appropriate have been distributed within the city. Six Empire Marketing Boards have again been utilised for the display of appropriate posters.

*Health Education Journal.*—The Health Education Journal was circulated to all members of the Committee quarterly.

*Hygiene.*—Publicity material bearing upon clean handling of food was issued to catering establishments in the city by the Central Council for Health Education and also by the Committee.

*Food Handling—Clean Food.*—The Committee on several occasions considered whether its activities in this field could be intensified in spite of the difficulties caused by restrictions and shortages of materials.

The Deputy Chief Sanitary Inspector, Mr. Hancock, attended a meeting by invitation to give the Committee a resumé of the position. He gave an outline of the relevant legislation, of the methods of inspection of food shops, cafes, fish and chip shops and the like, and the inspection and control of foods, milk and ice-cream.

It was agreed that as much was being done as was possible under present conditions but that further action could usefully be taken as soon as soap, wrapping materials and textiles for towels and protective clothing became more plentiful.

**Health Exhibition—"Health, Past and Present."**—The outstanding activity of the Committee during the year was a Health Exhibition—"Health—Past and Present"—organised jointly by the Leeds Committee for Social Hygiene and Health Publicity and the Health Committee.

The Exhibition was opened by Mr. John L. Edwards, Parliamentary Secretary to the Ministry of Health, on December 6th, 1948, and was open daily, except Sunday, until December 18th.

The Exhibition was designed to mark two milestones in the evolution of our health services; firstly the 100th anniversary of the passing of the first Public Health Act in 1848, and secondly the coming into force of the National Health Service Act, 1946.

The Exhibition was held in the Central Court of the Art Gallery and in the Statuary Hall. The Committee had wished to stage the Exhibition somewhere in the main shopping area of the city, but no suitable premises could be found. It may be remarked in passing that there is a real need in Leeds for a large public hall suitable for exhibitions of all kinds.

As its title implied, the Exhibition fell logically into two parts, a historical section and a modern section. The historical section, which occupied an "island" site in the Central Court, was lent by the Ministry of Health. It had previously formed part of the "Health of the People" Exhibition held in London and was made up mainly of descriptive matter, cartoons and "paper sculpture" illustrating health problems of a century ago, to act as a background to the modern services.

The modern section of the Exhibition consisted of topical items of health interest, in particular the services provided by the Local Health Authority under the National Health Service Act.

Considerable care was given to selecting exhibits for the Statuary Hall, since they would necessarily be seen by members of the public on their way to other parts of the building. Interesting exhibits in this hall would, it was hoped, lead the public to visit the remainder of the Exhibition also.

One complete side of the Statuary Hall was occupied by an attractive new exhibit of the Ministry of Agriculture and Fisheries illustrating the damage done by rodents and insect pests and the methods used for their control. Incorporated in this stand was a miniature cinematograph unit adapted for daylight showing of films. Upon this were shown a series of short films upon pest control. These were shown at intervals and proved very popular.

On the other side of the Statuary Hall a large diagram showed the main services provided under the National Health Service Act, illustrated by photographs of the services at work. Alongside this was the diphtheria immunisation stand with diagrams illustrating the value of immunisation. Members of the staff were available to answer questions and issue consent forms.

In the Central Court were shown the main body of the exhibits and the historical section already referred to.

*Clean Food.*—A number of stands illustrated aspects of this important topic, e.g. hygienic preparation and distribution of ice cream, dairy methods, milk and milk products, meat and other foods, food inspection and control. One stall was devoted to the equipment and methods of a model cafe kitchen. The Food Advice Bureau of the Ministry of Food showed welfare foods and various aspects of nutrition including a number of attractively prepared dishes.

The domestic appliances shown and the Electricity Supply Board's stall made a contribution to the clean food theme and also to that of smoke prevention. The latter topic was dealt with more explicitly on the smoke pollution stand which showed various aspects of the problem including a contour map showing the amount of soot deposit in various parts of Leeds which excited much interest.

A series of stalls showed examples of the work and activities of various Local Authority Services:—School medical and dental services, home nursing, maternity and child welfare, mental health, water, sewage, housing, disinfestation. All had topical and interesting displays. Perhaps the most striking of these was the home midwifery stand, which showed a bedroom arranged for a home confinement and included apparatus for gas-air analgesia and the equipment needed for the care of a premature baby.

The University Department of Bacteriology showed micro-photographs of some of the commoner disease-producing organisms.

A feature of the Regional Blood Transfusion exhibit was an electrical diagram with synchronised gramophone recording designed to explain the Rh. factor.

At the Mass Radiography stand the advantages of this health measure were clearly shown and appointments for examination could be made.

The Enquiry Bureau of the Ministry of National Insurance proved very popular and dealt with many queries.

The total attendance at the Exhibition was 7,423.

It must be admitted that the attendance was disappointing. Advertising before the opening day had been on a rather small scale, but a considerable increase in advertising after the first few days of the Exhibition had no obvious effect upon attendance. The B.B.C. gave an excellent commentary upon the Exhibition in "News from the North" which reached a wide audience.

The Committee are grateful for the help given by the Chairman and Chief Officers of a number of Committees of the Council. Without their help the Exhibition could not have been staged. Most of these have received a mention in the description of the Exhibition but a particular word of thanks is due to the Art Gallery Committee and the Library Committee for making accommodation available, and to the Works Committee for the erection of most attractive stands.

**National Activities.**—Government-sponsored press and poster publicity in relation to diphtheria immunisation and other health subjects has been maintained during the year and Leeds has shared in the benefits.

**Conferences.**—The Committee sent no official delegate to any conference during the year.

## TUBERCULOSIS

### SOCIAL WORK

*Miss J. W. Armitage, Senior Tuberculosis Almoner, reports:—*

Recent legislation has altered the administration of social work for the tuberculous. Before the "appointed day" this work was mainly done by the Leeds Association for the Care of Consumptives. The funds of the Association were derived from donations, subscriptions and interest on investments. The Association had at their disposal the services of the Local Authority's trained social workers. The Association undertook the distribution of the Ministry's allowances to eligible patients.

From the "appointed day" the Association continued their work as agents of the Local Authority. Since income from voluntary sources was likely to prove inadequate, the Local Authority undertook to reimburse to the Association any deficit incurred on approved expenditure. An average of 250 patients weekly received the Ministry's tuberculosis allowances up to the "appointed day." Thereafter allowances to sufferers from respiratory tuberculosis were payable by the National Assistance Board to whom eligible patients were referred. Many cases not entitled to these allowances were referred to the Board for grants for extra nourishment.

Up to the beginning of July the Association made cash grants or grocery orders to 138 patients and their families who were not entitled to allowances at a cost of £202 14s. 4d. After July 5th, cash grants could no longer be paid but the Association continued to help patients recommended on medical grounds for extra nourishment by granting grocery orders of up to 10s. per week. Such assistance is disregarded by the National Assistance Board in assessing allowances. 85 patients were helped in this way for periods of one month. Throughout the year the Local Authority supplied one pint of milk per day free to patients unable to afford the full priority ration. Prior to July 5th, 305 patients received this free milk and since then 312 patients have received it.

The need for beds, bedding, clothing and boots continued throughout the year. Up to July 5th, beds and bedding were supplied to 55 patients and since then to 81 patients. Clothing was also provided by the Association to 99 patients and their families up to July 5th out of their own funds. After July 5th the cost of clothing was met out of the Local Authority grant and it has been



possible to purchase a stock of clothing to be kept at the Clinic and given to patients as required. Clothing has been supplied to 118 patients and their families. Some need clothing to take with them to sanatorium; many patients put on so much weight during treatment that they need complete new outfits. Children are provided with strong footwear and warm clothes to prevent "chills" and so lessen the danger of infection.

Owing to the long waiting lists for sanatorium many patients have to be nursed at home and the demand for sick room requisites has been high and has increased during the year. In the first six months, sick room requisites were loaned to 18 patients; during the second half of the year to 50 patients. Larger articles such as wheel-chairs and spinal carriages are now loaned through the Health Department and the Red Cross Society. Smaller articles are supplied from our own stock.

Prior to July 5th, our patients had to find their own Home Helps from among their relatives and neighbours; there was a special allowance of 10s. per week under the Tuberculosis Allowances Scheme for the purpose. The Association supplemented this payment in needy cases. After July 5th the Local Authority's Domestic Help arrangements were used and 44 patients were referred for Domestic Helps.

Six people were sent to Convalescent Homes as a precautionary measure during the first six months and 29 during the second six months. No Convalescent Home will accept a notified case of pulmonary tuberculosis and a Convalescent Home for tuberculous patients is needed.

Up to July 5th, dentures were provided by the Local Authority at cost price; dentures were supplied to 45 patients free or at part cost. Since July 5th dentures have been provided free under the National Health Service Act. Surgical appliances were provided free to our patients prior to July 5th and the cost met by the Local Authority; during the first six months 22 patients were provided with appliances. Since July 5th appliances have been provided free under the National Health Service Act for 27 patients.

There are additional needs which are not met by the National Health Service Act arrangements or by the Assistance Board and this is where the Association can use its voluntary funds to advantage. Examples are: provision of extra furniture and household utensils to rehoused patients and help in removal to their new home; provision of extra comforts for necessitous patients; help to patients and their families in solving a great variety of personal and domestic worries.



The Social Worker has also been responsible for organising a lending library for the use of patients who are at home and who might otherwise use public library books, for advising patients about Insurance benefit and pension claims, for visiting patients in three Sanatoria and helping to run a Red Cross Library at one of these, for referring patients who are fit for work either to the Factory-in-the-Field or to the Ministry of Labour for retraining and for referring patients to other agencies for advice and assistance which may help them on the road to recovery.

**The Factory-in-the-Field.—Mr. T. Ramsbottom, Manager, reports :—**

During the year there has been no change in the activities carried out at this centre, namely, firewood chopping and bundling, brushmaking and printing. In the course of the year 25 tuberculous patients have been employed and 22 remained on the pay roll at 31st December, 1948. Of the three who ceased work, one died whilst two obtained employment in the open labour market.

The following table shows their distribution in the various departments :—

Department	Tuberculous	Non-tuberculous
Firewood .. ..	12	3
Brushmaking .. ..	4	2
Printing .. ..	6	1
Other employment .. ..	..	1
	<hr/> 22	<hr/> 7

*Loss of time due to Tuberculous Disability.*—Of the 22 tuberculous employees on the pay roll at 31st December, 1948, three were off work some part of the year by reasons of ill-health, as shown in the table appended.

	Number employed	Worked full time	Absent owing to sickness
Firewood Department			
(Males) .. ..	12	10	2 lost 98 days
Brushmaking Department			
(Males) .. ..	4	4	—
Printing Department (Males)	2	—	—
(Females) .. ..	4	1	1 lost 6 days

The average time lost per head amongst the 22 tuberculous employees was 4·7 days in the year, the respective figures for each department being firewood 8·2, brushmaking nil, printing 1.

## VENEREAL DISEASES

### MEDICAL SOCIAL WORK

*Miss M. D. Hearn, Venereal Diseases Medical Social Worker, reports :—*

Both the medical and social aspects of our work have altered considerably since its inception early in 1944. The social conditions affecting the incidence and spread of venereal diseases in Leeds were described in the report on the first year's work. These conditions have greatly improved in many respects since the cessation of hostilities and the improvement is reflected in the work of the Clinic. The resumption of normal family life by men and women, single and married, has lowered the incidence of venereal diseases. This is shown in the following table, which gives the number of patients, infected and uninfected, attending the Clinic for the first time in each of the last ten years.

YEAR	Men			Women			Children		
	Syphilis	Gonorrhoea	Negative	Syphilis	Gonorrhoea	Negative	Syphilis	Gonorrhoea	Negative
1939 ..	255	598	646	166	141	134	15	8	41
1940 ..	194	495	520	150	110	93	19	2	31
1941 ..	261	543	493	153	151	150	17	7	14
1942 ..	453	449	595	199	149	155	18	6	22
1943 ..	334	421	967	222	187	378	32	5	56
1944 ..	268	341	781	279	262	428	38	6	97
1945 ..	272	444	850	267	316	524	23	5	107
1946 ..	521	943	1,497	297	337	449	21	5	174
1947 ..	382	545	965	327	167	312	23	8	229
1948 ..	270	336	957	232	126	269	14	3	212

The peak year for both men and women was 1946. The rise in the number of new patients found not to be infected is interesting. Of 629 women patients new in 1948, only 358 were infected. This is due to educative measures designed to encourage those who have run the risk of infection to obtain advice.

An analysis has been made of 344 of the 358 women patients new in 1948 and found to be infected. Details are shown in the following table :—

AGE GROUPS										
5-16	16-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60+
2	31	78	73	47	37	18	26	13	10	9
MARITAL STATE										
Single		Married		Separated		Divorced		Widows		
98		181		42		6		17		
TYPE OF INFECTION										
Syphilis										
Primary		Secondary		Later		Congenital		Gonorrhœa		
14		42		151		22		115		

Of these 344 patients, 88 were promiscuous ; 174 were working, mostly in full-time employment.

The recognition of infections in the early stages is of immense value both medically and socially. It will be noticed that three times as many patients came to the Clinic in the later stages of syphilis as in the earlier. Had these been brought under treatment earlier, great suffering, mental and physical, could have been prevented, and also much loss of working capacity.

Of these patients 173 defaulted at some time during the year, some of them on several occasions. The number who defaulted once only was 82 ; twice 40 ; three occasions 17 ; four occasions 20 ; six and seven occasions twice each. To effect re-attendance 459 letters were sent and 241 visits paid. This resulted in the re-attendance of 308 patients. Four were transferred to other Clinics, 6 were given up as hopeless, 10 could not be traced and at the time of writing 41 had not yet re-attended.

The patients came to the Clinic from many sources, viz. :—

Referred by other hospitals or clinics	..	..	..	131
„ „ private doctors	..	..	..	26
„ „ husband attending here	..	..	..	53
„ „ „ „ elsewhere	..	..	..	1
„ „ consort „ here	..	..	..	42
„ „ „ „ elsewhere	..	..	..	7
„ „ child „ here	..	..	..	11
„ „ „ „ elsewhere	..	..	..	3
Transferred from other Venereal Disease Clinics	..	..	21	
Attended voluntarily	..	..	..	35
Attendance secured by Medical Social Worker	..	..	14	

The source of disease was unknown in 158 cases (70 of which were of many years standing and 21 transferred to other Clinics) and known in 186 cases (the source was the husband, consort or parents in 87, 77 and 22 cases respectively). All the known sources of infection were either brought under investigation at the Clinic or notified to Medical Officers of Health of other authorities.

In addition, 212 contacts of the 344 patients were investigated (54 husbands, 32 consorts, 98 children and 25 siblings attended this Clinic whilst 2 husbands and one child attended their own doctor).

Of the contacts, 163 were persuaded to attend for investigation, necessitating 110 domiciliary visits. In addition, 50 contacts were living in other areas and the appropriate Medical Officers of Health were informed, so that the contacts could be invited to attend a Clinic for investigation.

This analysis gives some indication of the work done in the Medical Social Department of the Clinic, for, in addition to these new women patients, there were 1,324 women and children attending the Clinic who first attended previous to 1948 and for whom much medical-social work has had to be continued. A considerable and increased amount of work was also done during the year for men patients.

*Contacts.*—Contact tracing and persuasion to attend for investigation presents many problems involving much patient work. It is important that all known contacts should attend for investigation without delay. Unfortunately, many patients do not know the source of their infection, some because the infection is of long standing, others because the name and address of the consort are unknown.

During the year 76 men, 79 women and 77 children, known to be contacts, were persuaded to attend for investigation.

Since the cancellation of Regulation 33B, the number of notifications from other authorities of suspected sources of infection has been negligible; during 1948 only 16 were received. Five suspects were found and investigated; eleven were untraceable.

Men demobilised from the Armed Forces still requiring treatment or observation and who are willing, are notified to the Medical Officer of Health of their home area. During 1948, 16 such notifications were received and 12 attended.

*Defaulters.*—The most difficult problem is the persistent defaulter. Many patients default at some time for adequate reasons such as illness of themselves or of a member of the family, but some appear unable or unwilling to accept the fact of infection, or the serious results of the neglect of treatment. This attitude is fostered by the occasional lack of symptoms or discomfort, or where these occur, treatment often dispels them so quickly as to produce a false belief of cure, exceedingly difficult to eradicate. Modern methods of treatment have considerably shortened the length of treatment and period of observation, but it still seems long to the patient who feels well and who may have difficulty in attending regularly. Overtime work, curious work-mates, friends or family, all play their part, but the location of the Clinic is a very serious obstacle for many are terrified of being seen to enter. Where the Medical Social Worker can maintain close contact with the patients, she may anticipate the discouragement felt by those who have been attending a long time and give a timely word of encouragement, or help to solve some problem which may prevent regular attendance.

When default has occurred, it is more difficult to secure re-attendance, but this is attempted by letters and visits. During 1948, 1,812 defaults occurred (including the group mentioned on (page 74). This may appear a large number, but it should be remembered that patients on active treatment are reminded immediately of their default to ensure continuity of treatment.

The number of patients visited for default was 537 and the number of visits paid was 1,804. Of these visits 700 were effectual. Re-attendance was secured on 1,641 occasions. Ten defaulting patients were traced by visit and transferred to other areas; 47 patients were visited for social reasons only.



The number of visits paid for all purposes was 1,961.

Although many patients are visited on Saturdays and occasionally on Sundays, in the hope of interviewing those who are working daily, the number of fruitless visits is large.

Saddest of all perhaps is the neglect of children by careless parents who fail to attend regularly. Occasionally the mother is overburdened with the care of other small children and father's co-operation is often difficult to enlist. The pregnant woman jeopardises her own health and that of her coming child by irregular attendance. The Children's Act could be of great value in ensuring that children receive adequate medical care, but, in practice, difficulties arise in its application.

In addition, many patients have social needs and disabilities, the removal of which may be essential before their co-operation can be expected. Classification of this work is almost impossible since much of it is of an intangible nature.

The aim of the Medical Social Worker is to interview every new patient on the first and second visits and frequently it is essential to continue in close touch for various reasons such as investigation of contacts, observation, help regarding marriage problems and other forms of social rehabilitation. During 1948, 5,006 interviews were given; 732 to new patients and 4,274 to old patients. The interview on the first attendance is extremely important, for the patient is then usually full of fears. She may also have feelings of resentment or remorse. The distress of a married woman learning, not only that she is infected, but also of her husband's unfaithfulness, can well be imagined. Frequently her immediate reaction is to decide to leave her husband and obtain a separation or divorce. But not infrequently, after careful deliberation, this feeling of hurt pride and resentment can be overcome. In other instances the infection which brought the patient to the Clinic may be the culmination of an old rift and it may then be desirable to persuade both partners to seek help from the Marriage Guidance Council. In this, as in all efforts towards social rehabilitation, it is essential to procure the patients' willing co-operation.



The single girl is often in need of help. She may have been infected by the man she intended to marry and his unfaithfulness may mean the shattering of her hopes and plans for the future. Again, she may be pregnant in addition to being infected, and if her family be hostile, she may need not only treatment, but also a home where she can live during her pregnancy.

Men patients, married and single, have various problems arising from their attendance at the Clinic. The most frequent problems are those of the defaulter and those arising in connection with work. These latter problems may arise from congenital disease or the need for re-training for an occupation more suited to the patient's limited capacities. Several patients have been rehabilitated in this way. The appointment of a male Medical Social Worker is desirable.

Patients whose sight or hearing are very defective and for whom little hope of recovery can be entertained need prolonged social treatment, for not only may their hands have to be re-trained in unaccustomed work, but their minds also must be prepared to accept the limitations of their disability, and at the same time be helped to realise that these need not prevent their remaining useful and self-supporting members of the community.

The shared home causes many young couples who have never had a home of their own to drift apart. The contraction of irregular unions and possibly eventual divorce often follow. The absence of privacy in an overcrowded household makes home life impossible and tends to drive the members, more especially adolescents, to undesirable associations.

Amongst children an infinite variety of problems arise, often requiring long term watching and work. Some parents seem indifferent to the welfare of their children and minor defects of sight and hearing pass unheeded; here special thought and care must be exercised regarding suitable work on leaving school. Occasionally children are in moral danger; these are dealt with according to the circumstances.

It will be evident that, in the Medical Social Work of the Clinic, co-operation with Social Workers of other statutory and voluntary bodies is essential. To these, and others who have contributed towards our work, much appreciation is due.

## CONVALESCENT TREATMENT

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Prior to the "appointed day," the scheme of convalescence was largely restricted to the rehabilitation of nursing mothers and their babies and of children under five years of age.

With the introduction of the National Health Service Act, the Local Authority was given permissive powers to make arrangements for the prevention of illness and the care and after-care of persons suffering from illness. The Council's proposals accordingly made provision for the convalescent treatment of patients of all ages who, on medical and social grounds, require a period of recuperation.

Initially it was decided to utilise the services of the Leeds Convalescent Society on an agency basis to carry out the detailed arrangements, the work being taken over by the Department at the end of 1948. The thanks of the Committee are due to the Society for the efficient and valuable work they carried out, for the help given in enabling members of the staff to gain experience in the administration of the Scheme, and particularly to the Honorary Medical Officers for the many hours devoted readily and voluntarily to the examination of cases.

Some difficulty was anticipated in securing sufficient beds as many convalescent homes were closed during the war or used for other purposes. Accommodation was, however, obtained at seventeen homes, of which seven admitted adults, four received adults and children, four took children only and two admitted mothers and babies.

The appended table gives details of the numbers and types of cases dealt with during the year, the figures in parentheses indicating cases for which the Committee were financially responsible.

1948	Adults	Mothers and Babies	Children	Total
Jan. 1st to July 4th ..	235 (22)	1 (1)	196	432 (23)
July 4th to Dec. 31st ..	248 (172)	15 (15)	183 (98)	446 (285)
Total ..	483 (194)	16 (16)	379 (98)	878 (308)

## SECTION 29

## DOMESTIC HELP

*The Domestic Help Organiser, Mrs. D. W. Alford, reports as follows :—*

The authorised establishment of the Domestic Help Section is as follows :—

Domestic Help Organiser .. ..	1 (appointed 19.7.48)
Whole-time Helpers (or equivalent part-time) .. ..	100
Clerks .. ..	2

During the period January to June, 1948, 13 Domestic Helps were employed, but after July the number steadily increased to 65. The number of each type of helper is shown below :—

Whole-time .. ..	34
Part-time .. ..	8
Co-opted full and part-time ..	23
	—
Total .. ..	65
	==

The total number of hours worked per week by these women is equivalent to the number which would be worked by  $58\frac{1}{2}$  full-time women.

Still more helpers are needed as the Section is now catering for a wide variety of cases.

## WORK OF THE SECTION

Type of Case	1st Jan. to 30th June, 1948	1st July to 31st Dec., 1948	Total Cases
Confinement .. ..	125	173	298
Various illnesses ..	13	112	125
Tuberculosis .. ..	..	24	24
Aged and infirm ..	..	15	15
Totals ..	138	324	462

Maternity cases have priority but help is being given to an increased number of accident, post-operative and long-term patients and sufferers from tuberculosis. Many women needing operations are now able to enter hospital, leaving their homes and children to the care of a Domestic Helper. The necessary care is also given after their return from hospital. The Section works in close liaison with the Convalescent Section and the home is run whilst the mother is away during convalescence.

Co-opted helpers, i.e. women who agree to act as Domestic Helpers for one particular patient (usually a relative), are of great value in dealing with tuberculous and paralysed patients as it is possible to leave them indefinitely, thus removing the fear that the Domestic Helper may be removed for an emergency or confinement case.

Green overalls are provided for the Domestic Helpers and uniforms are to be issued shortly.

The full charge for the services of a domestic helper is 2s. 2d. per hour, but a large number of patients prefer to be assessed. The original scale of assessment was found, in practice, to bear harshly on long-term cases, especially the tuberculous. The Health Committee therefore modified the scale for these cases, introducing a more generous scale which is greatly appreciated and which has done much to help cases of hardship.



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**Services Administered  
to  
5th July, 1948**

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## TUBERCULOSIS.

### CITY OF LEEDS HEALTH CLINIC AND SANATORIA.

#### STATISTICAL ANALYSIS AND REPORT, 1948.

BY

F. RIDEHALGH, M.A., M.D., M.R.C.P.

*Senior Chest Physician.*

**Epidemiology.**—The figures of tuberculosis mortality in Leeds for 1948 are again encouraging :—

Average Annual Deaths ..	1924-1928 ..	588
(all forms)	1934-1938 ..	422
	1944-1948 ..	307
Deaths (all forms) ..	1948 ..	273

The 1948 figures are shown in greater detail in the table on page 93. It will be seen that 245 or 89.7 per cent. of tuberculosis deaths were due to pulmonary tuberculosis. Of these, 181 or 73.9 per cent. occurred between the ages of 15 and 55. No other fatal disease has the same economic importance.

Statutory notifications, although subject to certain inherent fallacies, give a fair idea of tuberculosis morbidity. The 1948 total of 629 notifications is the lowest on record. The rise in notifications during 1941-1944 has not been maintained. It is noteworthy that average annual notifications for 1944-1948 numbered 700, as against 728 for 1934-1938. It is clear that mortality is falling much more quickly than morbidity as shown by notifications. This may indicate a better chance of recovery in the individual case.

**Diagnosis.**—The diagnostic work of the Clinic is concerned mainly with chest disease. Non-pulmonary tuberculosis usually comes to us for treatment and after-care with a ready-made diagnosis.

The total figures of new patients (excluding contacts) referred for opinion, will be found in the table on page 85. It will be seen that 2,770 were referred as suspected pulmonary tuberculosis. Most of these were referred directly by general practitioners, a few came from other hospitals and 230 from the Mass Radiography Unit. At the end of the year 300 of these were still under investigation. Investigations were begun and completed during 1948 on 2,470 patients and amongst these we found 343 cases of pulmonary



tuberculosis of whom 239 were sputum-positive. In other words, only 13.9 per cent. of new patients referred for opinion are found to be suffering from pulmonary tuberculosis. The remaining 86.1 per cent. includes every form of chest disease, and many cases involve reference to other clinics, such as the Thoracic Surgical Department of the General Infirmary. The overall percentage of cases found to be tuberculous falls steadily with the years. This is desirable, and indicates that patients are being referred on suspicion rather than certainty, with an increasing chance of early diagnosis, and also perhaps that the Clinic is fulfilling its modern function as a Chest Diagnostic Centre.

**Treatment and Supervision.**—The clinical supervision of treated cases, many of whom are “quiescent” or “arrested” and at work, accounts for a high proportion of the time of the medical staff. Although at first sight a routine matter, in actual fact this work, requires a higher degree of clinical acumen than any other section. During 1948 the number of tuberculous patients on the register fell slightly from 3,595 to 3,376. The number of attendances for routine supervision, each involving a full clinical examination, was 10,440 as compared with 10,327 in 1947.

Six sessions a week, including two evening sessions, are set aside for collapse therapy (artificial pneumothorax and pneumoperitoneum). During 1948, 5,280 refills were given. This figure shows an increase of over 400 per cent. in the past ten years.

The ultra-violet light clinic is in operation eleven sessions a week, and gave 7,161 treatments in 1948 (6,484 in 1947). Special treatments given numbered 873.

The medical staff paid 1,181 domiciliary visits, including 374 for the induction or maintenance of artificial pneumothorax. The delay in admissions to sanatorium has led to a great increase in the amount of domiciliary treatment, which has to be carried out as a life-saving measure in spite of its inherent risks which have in certain cases produced grave consequences.

**Radiological Work.**—The work of the X-ray department shows the greatest increase over pre-war figures. A record number of 10,253 films were taken during 1948, more than five times as many as in 1938. In addition, 10,352 routine X-ray screen examinations were made at the time of clinical examination or treatment.

**Dental Work.**—Mr. Hilton, the Senior Dental Officer, has submitted the subjoined table :—

**SUMMARY OF DENTAL TREATMENT GIVEN DURING 1948.**

				Health Clinic	St. George's Hospital	Gate- forth	The Hollies	Killing- beck	Home Visits	Total
Cases	{	Examined	.. ..	85	78	110	87	210	12	582
Treated		.. ..	161	33	43	42	134	12	425	
Inspected		.. ..	..	75	140	130	323	..	668	
Attendances		.. ..	.. ..	72	72	283	189	750	12	2,078
Extractions :—										
Local anæsthetic		.. ..	.. ..	410	54	92	37	295	8	896
N <sub>2</sub> O		.. ..	.. ..	14	..	..	11	..	..	25
Fillings				.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Scalings		.. ..	.. ..	164	44	57	41	125	..	431
Polish		.. ..	.. ..	25	17	28	2	60	..	132
Polish		.. ..	.. ..	6	..	7	5	24	..	42
Dentures :—										
Number completed		.. ..	.. ..	120	6	14	..	48	2	190
Patients fitted		.. ..	.. ..	60	3	4	..	27	1	95
Repairs, etc.		.. ..	.. ..	18	..	3	..	7	..	28
Other Treatments				.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Other Treatments		.. ..	.. ..	148	26	48	26	106	..	354

**Prevention.**—The responsibility for preventive measures is now the concern of the Local Authority and not that of the Hospital Management Committee. It is in this matter that clinical, environmental and social services overlap to the greatest extent. The duties of the two controlling bodies must be co-ordinated. In our own case, there has been no question of a long and happy marriage being disrupted by divorce. The inherent risk implicit in the Ministry's interpretation of the Health Act were early realised and quickly overcome. I wish to express to the Medical Officer of Health and his staff our full appreciation of the happy relationship which exists.

**Contacts.**—During the year, 1,263 "contacts" were examined with a total of 2,021 attendances—the highest on record. A special effort is made to ensure the annual examination and X-ray of adolescent and young adult "contacts." The examination of 429 "contacts" under 15 yielded nine cases of pulmonary tuberculosis, nearly all of the benign primary type. In examining 720 "contacts" over 15, 35 cases (4.9 per cent.) of active pulmonary tuberculosis were found, 15 of these being sputum-positive. These figures exclude cases still under observation.

## CONTACTS, 1948

	New Contacts Examined	T.B.+	T.B.—	N.P.	Negative, etc	Observa- tion
Males .. ..	280	7	6	..	252	15
Females .. ..	480	8	11	3	433	25
Boys .. ..	258	..	2	..	224	32
Girls .. ..	245	1	3	3	196	42
Total .. ..	1,263	16	22	6	1,105	114

Remaining under observation at 31st December, 1948, 85 (previous years—15; 1947-70) were re-examined as follows:—

	M.	F.	B.	G.
Definite P.T. .. ..	1	4	1	4
„ N.P. .. ..	..	..	..	..
Negative .. ..	8	13	24	19
Remaining .. ..	..	1	7	3
	9	18	32	26

Total examinations .. 2,021

Total cases .. .. 1,738

**Health Visitors.**—The Tuberculosis Health Visitors, although employed and paid by the Health Committee, continue to work full time at the Clinic and maintain the important link between the medical staff and the tuberculous families whom they serve. About half the time of a Health Visitor is spent in working the out-patient clinics and the rest in domiciliary visiting. She ensures the attendance of “contacts” and reports any environmental defects or social needs requiring attention. Even more important, she becomes a valued friend and adviser of patients and their families, and performs thereby the basic preventive duty of education in ways of hygiene.

During the year our Health Visitors paid 7,660 domiciliary visits. The increase from 6,501 in 1947 reflects great credit on them in view of the heavy and increasing load of work inside the Clinic.

**Housing.**—Certain remarks on this matter in my report for 1947 were given a good deal of publicity. As a result, I presented a detailed analysis of the families listed for rehousing to the Medical Officer of Health. A meeting with the Tenancy Committee of the Housing Department was attended by the Chairman and Deputy Chairman of the Leeds Health Committee, the Medical Officer of Health and the writer. The allocation of new municipal houses to tuberculous families was increased from 5 per cent. to 10 per cent. The housing position at December 31st, 1948, is as follows:—

Families on Housing list 31st December, 1947	..	266
Added during 1948	.. .. .	146
Applications deleted	.. ..	62
Families rehoused	.. ..	54
Families on Housing list 31st December, 1948	..	296

The figures do much less than justice to the present position. The rate of rehousing is becoming steadily greater during the early months of 1949. Much remains to be done, but a most determined effort is now being made to deal with this important matter. I wish to express to the Director of Housing my cordial thanks for his friendly attitude and close co-operation.

**Social Welfare.**—Financial worry is the everyday companion of the tuberculous. Privation perpetuates tuberculosis. Modern social legislation has done much to clear the horizon. Expert advice, however, is more than ever necessary to enable the needy and co-operative patient to make full use of the available means of help. The provision of such guidance takes up much of the time of the Almoner and her staff. She maintains close touch with the National Assistance Board; the Ministry of National Insurance; the Resettlement Officers of the Ministry of Labour who operate the Disabled Persons Employment Act; and with many other statutory and voluntary bodies. Direct help, mainly in kind, is given by the Case Committee of the Leeds Association for the Care of Consumptives which meets weekly for this purpose. This expenditure is met partly from a grant from the Health Committee and partly from the private funds of the Association. A detailed report of this work has been prepared by the Almoner (see page 70).

Pressure of social work at the Clinic leaves little time for work in the Sanatoria. It is, nevertheless, extremely important that all in-patients should have the opportunity to see the Almoner regularly. Since the problems of an in-patient are inseparable from those of



his family, it is most desirable that the work at the Sanatoria should be done by an Almoner from the Clinic who has full first-hand knowledge of the whole family circumstances. An increase in almoning staff will therefore be needed.

**Teaching.**—A course of clinical lectures has been given to senior medical students. Four lectures on administration and six on clinical tuberculosis, together with some practical instruction in the Clinic, have been given to post-graduate D.P.H. students. A course of lectures and practical instruction has been given to Student Health Visitors. Three courses of lectures have been given to classes of students at the District Nurses' Home. The preparation and delivery of lectures and practical instruction is time consuming but highly rewarding, and much more is necessary. In particular, the instruction of senior medical students is far from satisfactory. The formal lectures need to be supplemented by clinical teaching both at the Clinic and in the sanatoria. Under present conditions this is frankly impossible. There is neither time to teach nor room to accommodate students in the over-loaded clinical sessions at the Health Clinic.

Similarly, the initiation of original research is a pious hope for the future, although there are many problems and a wealth of clinical and statistical material for investigation.

**Publications.**—

"Tuberculosis in Young Adults." Report of the Prophit Tuberculosis Survey. (M. Daniels, F. Ridehalgh, V. S. Springett.) Published for the Royal College of Physicians, H. K. Lewis, London, 1948.

**The Hollies.**—This residential open-air school deals mainly with children showing evidence of benign primary tuberculosis, most of whom are direct family contacts of known cases of pulmonary tuberculosis. A healthy environment, extra rest, and an ample diet are the most important features of treatment, and since there are two full-time teachers for 40 children, the standard of individual teaching is probably better than in the average primary school. On the other hand, the educational standard of children admitted to "The Hollies" is often below normal on account of domestic difficulties or previous illness. During the year 54 children were admitted.

It must be pointed out that "The Hollies" is not suitable for the treatment of seriously ill or infectious children, nor can it deal

satisfactorily with children under 5 years of age. There is a very pressing need for the provision of facilities for the treatment of tuberculous infants.

Staff living accommodation at "The Hollies" is very poor. This fact is responsible for serious and recurrent staffing difficulties which can only be overcome by new building.

**Administrative.**—It will be realised from the foregoing paragraphs that the Clinic is dealing with a greater volume of work than at any time in the past. All patients are seen by appointment (except new patients attending for the first time). A clinical report is sent to the patient's doctor after practically every clinical examination or X-ray. Every increase in whatever aspect of the work of the Clinic produces a corresponding addition to the clerical work behind the scenes. The office also deals with many other matters such as reports for special purposes (e.g., the Ministry of Pensions and School Medical Officer), the preparation of statistics, admissions to sanatoria, and transport for sick patients.

This process of expansion has gone on steadily for several years. It will continue at an increased pace in the future, not only because the Clinic must soon begin to serve districts beyond the city boundaries, but because a wider range of service must be given now that the statutory limitations in respect of the treatment of tuberculosis no longer apply. Diagnosis, treatment and after-care all now involve more meticulous clinical work and a more complex series of special services. This does not mean that the facilities available for patients at the Clinic are in any sense "de luxe." In fact, the physical conditions are spartan, and there are many and serious shortcomings in the actual work done. These shortcomings, both clinical and clerical, arise from the continuous attempt to pour a quart into a pint measure—an attempt which must obviously fail. It is only through the loyal co-operation of every member of the staff under conditions of great difficulty, that a serious breakdown has been avoided. That breakdown will come unless bigger and better premises are found.

The Leeds Health Clinic occupies a special place in the tuberculosis service of the Region. It is the only tuberculosis clinic in which any teaching is done. It must in the future be a key centre for the training of future chest clinicians and ancillary workers. The development of a Clinic which will be an example of its kind is not a matter of prestige, it is plain economic necessity which will pay dividends for years.

## TUBERCULOSIS SERVICE RETURN—YEAR ENDING DECEMBER 31st, 1948.

DIAGNOSIS	RESPIRATORY						NON-RESPIRATORY						TOTAL				Gross TOTAL.
	Adults.			Children.			Adults.			Children.			Adults.		Children.		
	M.	F.		M.	F.		M.	F.		M.	F.		M.	F.	M.	F.	
1 (a) Number of definite cases of Tuberculosis on the Register at the beginning of the year	1,316	1,039		156	192		200	252		223	217		1,516	1,291	379	409	3,595
(b) Cases lost sight of which returned to the Dispensaries during the year .. ..	10	6		..	1		1	1		..	..		11	7	..	1	19
(c) Transfers in .. ..	34	32		2	..		2	4		3	1		36	36	5	1	78
2—Number of New Cases diagnosed as Tuberculosis during the year ..	75	57		7	13		20	34		27	27		95	91	34	40	527
(a) Class A (T.B. minus) ..	156	105		..	3		2	1		..	..		158	106	..	3	
(b) Class B. (T.B. plus) ..																	
3—Cases included in 1 and 2 written off the Register during the year as :																	
(a) Recovered ..	119	109		28	41		30	32		29	22		149	141	57	63	410
(b) Dead (all causes) ..	138	82		..	2		3	8		3	1		141	90	3	3	237
(c) Removed to other Areas ..	34	43		5	4		5	3		4	..		39	46	9	4	98
(d) For other reasons ..	31	25		5	5		5	2		13	12		36	27	18	17	98
4—Number of definite cases of Tuberculosis on the Register at the end of the year .. ..	1,270	980		127	158		181	247		204	209		1,451	1,227	331	367	3,376

Transferred from N.P. to P.T. = 1 male ; 1 girl.

## PULMONARY TUBERCULOSIS.

## AGES AT DEATH.

1948.	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65 +	Total
Males ..	..	1	..	9	22	31	41	32	23	159
Females ..	..	1	..	19	27	23	9	5	2	86
TOTALS	..	2	..	28	49	54	50	37	25	245
Average 10 years 1938-1947	1	1	3	51	66	65	66	51	21	323

## NON-PULMONARY TUBERCULOSIS. DEATHS.

1948.	Tubercular meningitis.	Abdomin- al.	Bones and Joints.	Other tuber- culosis.	Total.
Males ..	9	1	3	2	15
Females ..	4	..	..	9	13
Totals ..	13	1	3	11	28

## AGES AT DEATH.

1948	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males ..	..	8	2	1	2	1	..	..	1	15
Females ..	..	2	2	5	2	..	..	1	1	13
Totals ..	..	10	4	6	4	1	..	1	2	28
Average 10 years 1938-1947	3	13	9	6	4	3	3	2	2	45

## Notifications of tuberculosis received during the year.

## PULMONARY.

Ages.	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total.
Males..	..	5	5	56 (6)	57 (12)	48 (1)	61 (1)	37	11 (1)	280 (21)
Females	..	2	15	76 (5)	67 (11)	31 (2)	14 (1)	10	2	217 (19)
Totals..	..	7	20	132 (11)	124 (23)	79 (3)	75 (2)	47	13 (1)	497 (40)

## NON-PULMONARY.

Ages.	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total.
Males..	..	16	20 (3)	10	6	5	2	1	3	63 (3)
Females	..	14 (1)	16	15 (2)	11	6	4	2	1	69 (3)
Totals..	..	30 (1)	36 (3)	25 (2)	17	11	6	3	4	132 (6)

Figures in brackets are 'Transfer In' cases and are included in the totals.

**Killingbeek Hospital and Sanatorium.**—*Report by Dr. W. Santon Gilmour, Medical Superintendent.*—Last year's report dealt with the Hospital's first completed year of accommodating the tuberculous since the war. This year has been a period of transition. Before July 5th the hospital was under the old administration, and for the remainder of the year under agency administration by the Local Authority on behalf of the Management Committee. In the circumstances, planning was difficult.

It is still early to write about future developments. The Hospital, apart from having to be fitted into its new local grouping, will be an integral part of the scheme for dealing with tuberculosis in the Region. It is possible that because of its facilities Killingbeck will become a centre for surgical intervention and special procedures, and will admit patients for such from other parts of the area. The heavy male waiting list of other areas may mean a slowing down of service to Leeds residents. They will also call for more and skilled nursing staff, a tough problem.

There have been no really new developments during the year. From the statistics it will be seen that the hospital has been filled to capacity, no mean feat, the result of constant juggling with nursing staff and the maximum dilution with untrained lay assistance.

Every form of special treatment is available to the patients who are suitable and increasing numbers have been given the benefit of them. The average stay in hospital for pulmonary cases—219 days for males and 216 for females—is an increase of 70 odd days over last year. The increase is related to special treatment but creates a greater waiting list.

A much needed Bacteriological Laboratory has been set up since the last report; the work done is enough evidence of its former need. It is, however, cramped for space and some apparatus is not in action for lack of accommodation.

*Staff.*—The Steward, Mr. J. Tyler, has been appointed to "A" Group staff, a personal and administrative loss to this hospital. As yet he has not been replaced.

The post of Deputy Medical Superintendent has been established and Dr. A. M. Revie confirmed in the appointment. He proved his ability as a Deputy in carrying on the Hospital during the Medical Superintendent's absence in Africa for three months.

The pressure of special clinical work has demanded more medical staff and the Hospital was fortunate in obtaining a Registrar through the Post-Graduate Scheme, a registrarship first ably held by Dr. J. Roche and, since his departure, by Dr. A. K. Daniels. The registrarship is an established post now, but it is hoped will always be filled in liaison with the Medical School.



After a long period of temporary service by Dr. Marjorie Oxley, the Senior Medical Officer's post was filled by Dr. T. P. Lennan, who took up duty in December.

Except for the senior nursing staff who are still here, changes in the nursing staff under present conditions have been too numerous to detail.

*Maintenance.*—Maintenance and structural improvements are seriously in arrears. Some of this work is urgent; for example, dampness due to fallen gutters is causing damage in K7 block.

*Acknowledgments.*—There are many acknowledgments due this year. Firstly, to the "B" Group Management Committee and their officials who, from the first, have taken a very active interest in the affairs of the Hospital; and secondly, to officials of the City Corporation, in particular the Health Department, who carried on in an agency capacity. The staff of the Regional Hospital Board are always willing to help. Finally, thanks are due to the Killingbeck staff for their good work during a difficult year.

Our specialist consulting staff continue their unstinted service; the operative work during the year shows this. The co-operation of St. James's Hospital and Pinderfields Thoracic Surgery Unit have made the work possible.

*Statistics.*—The following table gives details of admissions, discharges, etc., to and from the Hospital during the year:—

	Males	Females	Children	Total
Patients remaining in Hospital 1st April, 1948 .. ..	116	76	..	192
Admitted during year .. ..	206	128	2	336
Total treated .. ..	322	204	2	528
Discharged during year .. ..	161	91	..	252
Died .. ..	47	15	..	62
Patients remaining in Hospital 31st March, 1949 .. ..	114	98	2	214

The average percentage of bed cases was 83.4 and average length of stay for discharged patients was: males (pulmonary) 216.8 days, males (non-pulmonary) 276.3 days; females (pulmonary) 219.5 days, females (non-pulmonary) 170.0 days; children (pulmonary and non-pulmonary) nil.

*Special Treatment.*

X-Ray examinations .. .. .	3,617
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Discharged cases which had Artificial Pneumothorax treatment .. .. .	90
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Total number of refills given to the above cases	1,900
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Number of cases requiring continuation of Artificial Pneumothorax after discharge ..	36
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## Pneumo-peritoneum :

Number of discharged cases treated ..	25
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Number of refills given .. .. .	591
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Number of discharged cases treated by Streptomycin .. .. .	32
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## Results :—

Quiescent .. .. .	1
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Improved .. .. .	21
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Died .. .. .	6
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No material improvement .. .. .	4
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Number of cases treated by "P.A.S." ..	2
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## Results :—

Died .. .. .	1
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No material improvement .. .. .	1
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Cases discharged with negative sputum which had been positive :—	
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Males .. .. .	40
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Females .. .. .	31
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*Surgery.*

Consultations .. .. .	244
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Phrenic Crush .. .. .	26
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Bronchoscopy .. .. .	44
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Thoracoscopy .. .. .	81
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Cavity Drainage .. .. .	1 case (2 stages)
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Extrapleural Pneumothorax .. .. .	11
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Thoracoplasty .. .. .	36 cases (71 stages)
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Lobectomy .. .. .	2
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*Bacteriological Laboratory.*

## Specimens examined :—

For Killingbeck Hospital	..	..	..	5,308
„ Seacroft Hospital	..	..	..	9
„ Gateforth Sanatorium	..	..	..	49
„ St. George's Hospital	..	..	..	1
„ Health Clinic	..	..	..	26
Total				5,393

*Occupational Therapy Centre.*

## Articles made :—

Leather bags	..	..	..	..	290
Soft toys	..	..	..	..	850
Miscellaneous	..	..	..	..	420

**St. George's Hospital.**—Since July 5th, 1948, this Hospital has been part of "B" Group and the tuberculosis wards have become part of the tuberculosis scheme of the Group. Dr. Herd from the Tuberculosis Clinic continues in charge of these patients. He reports :—

"St. George's Hospital was built half a century ago for use as a Public Assistance Institution. In December, 1940, owing to the closing of Killingbeck Sanatorium, it was decided to open two wards to accommodate 60 tuberculous patients (30 males and 30 females). Owing to the admission of the more advanced type of case, the mortality rate is high and this, along with the Poor Law stigma, has made it difficult to get treatable cases into these wards. However, in spite of all its drawbacks, many patients have expressed their appreciation of the treatment which enabled them to return to their homes and work.

Since the appointed day there have been numerous changes. Early in February of this year we vacated the south half of Ward 7 in order that four cubicles could be constructed to provide accommodation for dying cases. Previously the dying had to be kept in the wards to the detriment of the other patients.

In the near future, we hope to have easy chairs, new bed tables, lockers and individual wireless headphones. During the

past twelve months, Mr. Stobbs has given unlimited time and energy arranging concerts and cinema shows for the patients, which have done much to relieve monotony.

Owing to lack of accommodation during the ward decorations and in order to maintain 27 beds, eight cases had to be transferred to Ward 3.

On the 31st March, Mr. Sandeman (Steward) retired after 22 years faithful service. Miss Hooley, Deputy Matron, left to become Matron at St. James's Hospital (North). Miss Hooley worked as a Sister for several years when the tuberculosis wards were first opened in 1940 and was a great favourite amongst patients and staff.

The Rev. Francis left us early in the New Year to take up work as Chaplain to St. James's Hospital. His Friday lunch-time visits were much appreciated."

*Statistics.*—The following table shows the admissions, discharges, etc., to and from the hospital during the year:—

Patients remaining in hospital on 1st April, 1948 .. ..	31
Admissions during the year .. .. .	46
Total treated .. .. .	77
Discharges .. .. .	37
Deaths .. .. .	13
Patients remaining in hospital on 31st March, 1949 ..	27

### *Special Treatment.*

Number of cases treated by Artificial

Pneumothorax .. .. . 18

Artificial Pneumothorax refills .. .. . 669

Number of cases treated by postural retention 11

### *Surgery.*

Consultations .. .. . 46

Thorascopies .. .. . 21

Bronchoscopy .. .. . 1

Thoracoplasty .. .. . 2 cases  
(5 stages)

Extrapleural pneumothorax .. .. . 1

**Gateforth Sanatorium.**—There has been little change during the year. As indicated by the statistics, it has still not been possible to fill all the 94 hospital beds and 6 chalets because sufficient nursing staff cannot be obtained.

It has been a struggle to staff the average of 65 beds through the year. There have been but two fully trained nurses on the wards, both rehabilitating on reduced hours. The remaining staff have been assistant nurses and orderlies.

Demobilisations from the Services are fewer and male recruits for nursing are becoming scarce, particularly for a hospital in the country without easy access to town. The position is becoming more serious every year.

It is not likely that Gateforth will revert to its convalescent role; in fact, treatment of an active type is on the increase, as all the patients admitted are hospital cases. The demand for skilled nursing staff is urgent.

The number of hospital beds was increased by new building during the war; extra staff accommodation was not provided. Modification of existing staff accommodation has been sanctioned but will not meet the extra needs.

Apart from the difficulty of nursing staff, the smooth running of the hospital is hampered by the necessity of employing many non-resident domestic workers who do not properly cover the day's work because of isolation and transport inconveniences. These points are not stressed in a spirit of pessimism but to show the difficulties that have to be faced.

The only major staff change during the year has been the appointment of Miss Campbell as Assistant Matron on the resignation of Miss Cattinach. Wastage in the male nursing staff has been fairly high and difficult to make good. This year Dr. A. C. Meek will retire on pension after 18 years at Gateforth. He will be missed by his colleagues, staff and patients and it will not be forgotten that he has "held the fort" single-handed all these years. The future of medical staffing at the hospital is subject to the plans for the tuberculosis service in the Region. It is hoped that there will be more than one medical officer resident,

There has been no change in the fabric and the minimum of maintenance has been carried out.

The X-ray plant provided at the commencement of war was for screening in the main. With the beds doubled and the type of patient changed, there is a vital need for a fully diagnostic set for chest work properly housed. It is not possible now to carry out the X-Ray examination by bringing cases into Killingbeck Hospital or the Chest Clinic.

The association with Killingbeck Hospital has continued and it is hoped that reorganisation in the Region will not break this association.

*Statistics.*—The following table gives details of admissions, discharges, etc., to and from the Sanatorium during the year:—

Admissions during year ended 31st March, 1949 .. ..	95
Discharges during year ended 31st March, 1949 .. ..	77
Deaths .. ..	12
Average length of stay .. ..	234 days
Average number of patients in hospital .. ..	65
Number of Artificial Pneumothorax refills given .. ..	1,415
Percentage of bed patients .. ..	51%

#### *Thoracic Surgery.*

Consultations .. ..	52
Thorascopies .. ..	25
Bronchoscopies .. ..	3
Phrenic Crushes .. ..	2
Thoracolysis .. ..	1
Thoracoplasty .. ..	6 cases
	(14 stages)
Extrapleural Pneumothorax .. ..	2



**LEEDS CITY GENERAL HOSPITALS**

BY

W. McINTOSH, M.B., Ch.B.

*Medical Director.*

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On the 5th July, 1948, the Municipal General Hospitals were transferred to the control of the new Hospital Management Committees: St. James's, St. Mary's and Cookridge Hospitals to the Leeds "A" Group and St. George's Hospital to "B" Group. This report is, therefore, concerned only with the first half of 1948.

**ST. JAMES'S HOSPITAL (SOUTH)**

During the period under review, 5,799 patients were admitted and 692 babies were born in the Hospital. Major and minor operations performed numbered 2,330 and 300 respectively.

The work in the Medical and Surgical Departments was maintained, but no more beds were brought into use on account of the shortage of nursing staff.

In the Children's Department an innovation was the appointment by the Leeds Education Committee of a part-time teacher for children whose complaints required them to spend long periods in hospital. This proved very successful and considerable benefit was derived by the children from her services.

In the Maternity Department the number of confinements was well maintained, being 704 for the six months. No maternal death was recorded, but there were 24 stillbirths and 27 infants died within ten days of birth. New cases attending the Ante-Natal Clinic numbered 730; total attendances at the Ante-Natal Clinic numbered 3,557 and at the Post-Natal Clinic 370.

In the Psychiatric Department 344 patients were admitted. Of these 113 were certified and transferred to Mental Hospitals, 49 entered Mental Hospitals as voluntary patients and 5 as temporary patients.

In the Radiology Department 4,796 patients were X-rayed, of whom 419 were screened and 191 examined by means of the portable unit. The waiting time for patients has been considerably reduced.

In the Pathology Department 12,847 routine investigations were carried out and 265 autopsies performed.

The Physiotherapy Department carried out a total of 32,764 treatments. New in-patients numbered 552, while the number of new out-patients was 291. Out-patient attendances totalled 6,390. A new service was the provision of treatment for school children suffering from postural defects and abnormalities of the feet and legs.

Certain improvements which had been authorised by the Health Committee were proceeded with, e.g. modernisation of ward kitchens and sluice rooms. A most useful addition was the provision of a staff location system, with 35 loudspeakers distributed throughout the hospital and linked to the telephone exchange. This proved of great value in the speedy location of members of the staff and was a boon to the telephone operators.

The Nurses' Training School showed very satisfactory results, 77 per cent. of entrants passing the State Final Examination, 86 per cent. Part I of the State Preliminary and 95 per cent. Part II.

The principal staff appointments during the six months were : Dr. W. Goldie, M.A., M.B., Ch.B., M.R.C.P., took up duty as Chief Pathologist at St. James's on the 1st January. Dr. G. M. Bonser, M.D., Ch.B., M.R.C.P., took up duty as part-time Morbid Anatomist and Mr. J. N. F. Powell, B.Sc., was appointed Chemical Pathologist and commenced duty on the 1st March.

Dr. S. J. Hartfall resigned his appointment as Consulting Physician on the 30th March and Dr. J. W. Affleck, Deputy Medical Superintendent for the Outer Group of Hospitals, resigned on the 31st May to take up appointment as Assistant Medical Officer of Health for the Mental Health Services in Leeds.

### **ST. JAMES'S HOSPITAL (NORTH)**

Admissions for the half-year were 554 and discharges 362, both figures showing a very substantial increase. Deaths numbered 199.

The pilot Geriatric Unit, which had been successfully tried out at St. Mary's Hospital, was transferred to St. James's Hospital (North) in February. The procedure was that all patients admitted to the chronic wards of the General Hospitals passed through this Selection Unit in the first instance. Some were given physiotherapy

or other appropriate treatment and improved to such an extent as to be able to return home. Others were transferred to suitable wards in St. James's Hospital (North) or other General Hospitals, an effort being made all the time to keep certain classes, e.g. young chronics, in certain wards. This innovation resulted in quite an appreciable increase in the turnover, as is shown in the admission and discharge figures.

### **ST. MARY'S HOSPITAL**

The Maternity Department continued to be very active. During the period under review there were 1,056 live births. There were no maternal deaths and the number of infants dying within ten days of birth was 16. Stillbirths numbered 26.

Admissions to the chronic wards numbered 77, and there were 30 deaths. There were 101 chronic patients in hospital on the 30th June, 1948.

### **ST. GEORGE'S HOSPITAL**

This hospital continued to provide approximately 250 chronic beds and during the period under review 137 chronic patients were admitted. The deaths numbered 57. These figures do not include a ward of 30 beds which was occupied by women suffering from pulmonary tuberculosis.

### **COOKRIDGE HOSPITAL**

Cookridge Hospital continued to cater for convalescent women, long-term children's cases and chronic female cases. The admissions in the six months totalled 110, of whom 8 were chronic cases, 51 convalescent women from St. James's Hospital and 51 children. The deaths totalled 8.

**SEACROFT INFECTIOUS DISEASES HOSPITAL**

BY

E. C. BENN, M.B., Ch.B., D.P.H.

*Medical Superintendent.*

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The table which follows summarises the chief infectious diseases treated at Seacroft Hospital from 1st January to 4th July, 1948, and shows that the fall in the incidence of most of the important infectious diseases which has been taking place during the last ten years still persists. Scarlet fever continues to assume a mild form. Severe cases are rarely seen and one death only has taken place in hospital from scarlet fever during the last  $3\frac{1}{2}$  years. The incidence of the disease is at present very low.

During the first half of 1948, 15 patients suffering from diphtheria were admitted to hospital. There was no death. This very small number suggests that the figure for the full year will be a record low one.

Gastro-enteritis retains first place by a considerable margin over other acute infectious diseases as a cause of death in young children, and the importance of this disease cannot be over-emphasised. The incidence, which increased considerably in Leeds in 1947, appeared to be decreasing slightly in the first half of 1948, but it was still higher than normal. The type of gastro-enteritis in this area is severe and a large proportion of patients are critically ill, often moribund, on admission to hospital. The public should understand that early medical attention, often requiring admission to hospital is essential in the treatment of this disease.

No disease has occurred in epidemic prevalence in the first half of 1948 and a large proportion of the beds in Seacroft Hospital remain vacant. As it is unlikely that the severe infectious diseases for which the hospital was built will recur in epidemic incidence if social conditions remain unchanged, it is to be hoped that some other use will soon be found for that part of the hospital which is now vacant.

## SEACROFT HOSPITAL, LEEDS

ABSTRACT FROM REGISTERS  
January 1st to July 4th, 1948.

	Diphtheria	Enteric Fever	Erysipelas	Gastro- Enteritis	Measles	Pertussis	Puerperal Pyrexia	Rubella	Scarlet Fever	Veneral Diseases	Other Diseases	Total
Patients remaining in Hospital, December 31st, 1947 ..	2	2	1	6	..	1	..	..	78	..	25	115
Admitted to July 4th, 1948 ..	15	..	17	79	16	22	12	8	340	62	195	766
Total treated ..	17	2	18	85	16	23	12	8	418	62	220	881
Discharged ..	15	2	16	62	12	8	11	7	366	55	171	725
Died ..	..	..	..	19	1	1	..	..	..	..	21	42
Completed cases ..	15	2	16	81	13	9	11	7	366	55	192	767
Mortality per cent. ..	..	..	..	23.5	7.7	11.1	..	..	..	..	10.9	5.5
Patients remaining in Hospital, 4th July, 1948 ..	2	..	2	4	3	14	1	1	52	7	28	114

**REPORT ON THE WORK OF THE VENEREAL DISEASES  
TREATMENT CENTRE DURING THE PERIOD 1st JANUARY  
TO 5th JULY, 1948**

BY

ROBERT LEES, M.D., M.B., Ch.B., F.R.C.P.

*Venereal Diseases Officer.*

**Incidence of Disease.**—The steady decline in the incidence of venereal disease has continued. This is considered to be a gradual return to normal conditions as opposed to war-time disturbances of the population and also the virtual cessation of large scale demobilisation and the adjustment of the younger section of the population to home life. In addition it is probable that the influence of modern methods of treatment is now being felt, as all contagious cases are treated very intensively and where possible admitted to hospital for isolation in order to minimise the risks to the community.

A considerable number of the cases dealt with at the Treatment Centre have only been detected and brought to hospital for investigation and treatment by the efforts of the clinic staff to trace all sources of infection and contact cases. Through these efforts many men, women and children are treated for disease which had not been suspected by the patient or family doctor; in this way we prevent the late, more serious, and often intractable forms of disease.

The large number of cases classified as "non-venereal" is largely misleading. Many have no disease, but desire examination and reassurance as they may have been in contact with an infected person. This is one result, and not an undesirable result, of propaganda both in the Services and civilian life. The remainder suffer from other diseases due to sexual intercourse but which are not classified officially as "venereal diseases." Such conditions as urethritis in the male and certain forms of leucorrhœa in the female require a considerable amount of investigation and treatment, and are just as important to the community as gonorrhœa.

**Methods of Treatment.**—No radical change has been made in methods of treatment and very satisfactory results appear to be obtained with a gratifying absence of severe toxic effects.

I am grateful to my professional colleagues on the staff of the hospitals in Leeds for sending cases for investigation and treatment and also for assistance in the diagnosis of difficult cases.



The dearth of hospital accommodation makes it very difficult to give adequate treatment to late cases of syphilis, especially where residence in hospital for many weeks would be beneficial. But even in spite of difficulties the most urgent and serious cases and practically all expectant mothers can be admitted without long delay.

**Accommodation.**—Plans for the internal reconstruction of the Out-Patient Department at the Leeds General Infirmary have been approved and work is to be carried out between September, 1948, and March, 1949. This should assist the efficiency of the work and afford the patients a greater degree of privacy and comfort. The In-Patient facilities are still unsatisfactory and there is urgent need for general hospital facilities in one of the Leeds hospitals which can provide adequate laboratory and radiological services.

**Social Services.**—The sociological aspects of venereal disease work have been developed very considerably during the year reviewed. In particular the search for sources of infection and contact cases has been intensified and has met with a great measure of success. The social workers have also proved invaluable in securing regular attendance of patients until their condition was cured and they have helped the patients to surmount many domestic and similar difficulties.

In my opinion the prevention of venereal disease can best be effected now by concentration on the sociological work in co-operation with the medical staff of the hospitals. The medical treatment is designed to secure rapid control of contagion and to prevent relapse, securing if possible 100 per cent. cures. The sociological services aim at detecting the hidden sources of the infection in the community and in bringing under observation and treatment all persons who may have been infected by known cases. For example it is frequently necessary to investigate every member of a family. In other cases, a promiscuous person has been proved to have transmitted the infection to three or four others, some of whom had no suspicion that they had been infected. It is difficult, however, to make headway against the fundamental causes of a high venereal disease rate in a community amongst which are bad housing, faulty education—especially in sexual matters—ignorance, overcrowding and lack of healthy recreational facilities.

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# Sanitary Circumstances

BY

JAMES GOODFELLOW, M.R.San.I., A.M.I.S.E.,

*Chief Sanitary Inspector.*

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With Comments on the following matters :—

**MEAT INSPECTION**

**DISEASES OF ANIMALS**

**MILK SUPPLIES**

**FOOD AND DRUGS**

**ICE-CREAM**

**FACTORIES**

**SMOKE ABATEMENT**

**HOUSING**

**GENERAL SANITATION**

**DISINFESTATION**

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## SANITARY CIRCUMSTANCES

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**Staff.**—During the year the re-organisation of the sanitary inspectors' department was accomplished. It had been felt for some time that the general work of the department could be carried out with greater facility and efficiency by the setting up of four administrative divisions instead of the previously established arrangement of only two divisions. In spite of the large number of newly-qualified inspectors that have been appointed to the staff, the new arrangement has worked very well.

Prior to the change, the deputy chief sanitary inspector was required to supervise the work of one division. The new arrangement released him from this narrow responsibility so that he could properly act as deputy as regards all sections of the sanitary inspectors' department.

The following divisional or supervisory inspectors were appointed during the year in connection with the re-organisation mentioned above, or to fill posts rendered vacant by retirement of officers :—

Mr. D. Forbes	..	..	Meat and Other Foods Division
Mr. H. P. Gill	..	..	Housing Division
Mr. W. Givens	..	..	Northern Division
Mr. D. Bowers	..	..	Southern Division
Mr. C. Busfield	..	..	Eastern Division
Mr. J. S. Lindley	..	..	Food and Dairies Division.

During the year Mr. C. W. Lamb was appointed as Supervisor of the Disinfestation and Disinfecting Station at Stanley Road.

My thanks are due to my deputy, the supervisory officers and all sanitary inspectors for their work during the year.

## MEAT INSPECTION

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**Slaughter-Houses.**—Of the licences of seven slaughter-houses which were renewed at the beginning of the year, two licences were voluntarily surrendered, leaving the following licensed places of slaughter, in addition to the Leeds Abattoir, namely :—Leeds Industrial Co-operative Society, Ltd., Danube Road ; P. H. Hutchinson, 21, Otley Road ; C. H. and J. W. Ellison, Cross Lane, Wortley ; G. H. W. Wilson, Marshall Street, Cross Gates, and C. Walker, Harrison's Yard, Bramley. The slaughter-house belonging to the

Leeds Industrial Co-operative Society continued to be used as a Government slaughter-house by the Ministry of Food. Only two of the licensed slaughter-houses were used for the occasional slaughtering of cottagers' pigs under licence from the Ministry of Food, and in this connection at the request of the Sanitation, Food and Drugs Committee, a communication has been made with the Food Executive Officer in the hope that in the future more use will be made of all licensed slaughter-houses.

The knacker's yard belonging to J. R. C. Wilkinson at 133, Carr Moor Side, Hunslet, has been well conducted and accordingly its licence has been renewed.

The carcases and offal of all animals slaughtered for human consumption were inspected at the time of slaughter by Meat Inspectors stationed at the Abattoirs, and this work is illustrated by the photograph opposite page 112.

**Slaughter of Animals Act, 1933.**—During the year 21 new licences to slaughter or stun animals were granted by the City Council and 105 licences were renewed. No legal proceedings were taken under this Act.

With regard to the issue of new slaughtermen's licences, it is the practice for the applicant to be trained by qualified slaughtermen. At the end of training the applicant demonstrates his ability to use a mechanically operated instrument, and is examined by the Supervisory Meat Inspector who issues a report as to his efficiency and suitability for the work.

The following table gives an analysis of the animals slaughtered at the two Government slaughter-houses :—

ANIMALS SLAUGHTERED AT GOVERNMENT SLAUGHTER-HOUSES.

	Year	Cattle ex. Cows	Cows	Calves	Sheep	Pigs	Total
Government Slaughter-house No. 1 (Public Abattoir) .. ..	1947	15,008	4,457	13,226	56,596	364	89,651
	1948	14,215	3,281	11,021	54,246	811	83,574
Government Slaughter-house No. 2 (Danube Road) .. ..	1947	5,290	1,458	4,641	23,020	381	34,790
	1948	5,608	1,250	4,664	20,532	452	32,506

In addition to the above animals, 3,251 horses were slaughtered at the Public Abattoir for human food,

Mr. Forbes, the Supervisory Meat Inspector, reports on the different species of animals and the number of whole carcasses or parts condemned for tuberculosis and other diseases in the following table :—

**CARCASES INSPECTED AND CONDEMNED.**

	Cattle (excluding cows)	Cows	Calves	Sheep and Lambs	Pigs	Horses
NUMBER KILLED ..	19,823	4,531	15,685	74,778	1,263	3,251
NUMBER INSPECTED ..	19,823	4,531	15,685	74,778	1,263	3,251
<b>ALL DISEASES EXCEPT TUBERCULOSIS.</b>						
Whole carcasses .. ..	8	37	73	74	18	17
Carcases of which some part or organ was condemned .. ..	3,486	1,386	20	2,036	137	375
Percentage of numbers inspected affected with diseases other than Tuberculosis .. ..	17.63	31.41	0.59	2.82	12.27	12.06
<b>TUBERCULOSIS ONLY.</b>						
Whole carcasses .. ..	46	225	4	1	11	..
Carcases of which some part or organ was condemned .. ..	1,604	1,725	6	..	65	..
Percentage of numbers inspected affected with tuberculosis .. ..	8.32	43.04	0.06	0.001	6.02	..

The very high percentage of cows affected with tuberculosis is noteworthy.

**Meat and other foods condemned as unsound.**—The total weight of food destroyed by consent during the year was 708,932 lbs., as compared with 771,834 lbs. in the previous year. About half the total weight condemned comprised carcasses of cattle, swine and sheep or parts of carcasses and offal found to be diseased at the time of slaughter.

There is a noteworthy decrease in the weight of horseflesh condemned although the number of horses slaughtered has risen; this is because there has been an improvement in the class of horse slaughtered for human consumption. The decrease in the condemnation of fish has been due to some extent to the lessening of supplies.





MEAT INSPECTION AT PUBLIC ABATTOIR  
*Incision of carcase lymphatic gland.*





FOOD INSPECTION IN FISH MARKET  
*Sampling of shell fish for bacteriological examination.*

Details of food destroyed are given in the following table:—

MEAT, ETC., DESTROYED BY CONSENT.

	1948.	1947.	1946.	1945.
Beef .. ..	176,356 lbs.	212,359 lbs.	171,435 lbs.	231,681 lbs.
Veal .. ..	2,889 "	3,483 "	2,747 "	2,420 "
Mutton .. ..	3,891 "	5,999 "	6,453 "	5,241 "
Pork .. ..	7,408 "	2,979 "	4,111 "	10,521 "
Bacon and Ham ..	..	140 "	103 "	1,048 "
Offals .. ..	204,595 lbs.	214,615 "	196,212 "	176,468 "
Rabbits .. ..	1,417 "	1,313 "	3,365 "	3,916 "
Poultry .. ..	2,149 "	1,366 "	1,447 "	8,725 "
Game .. ..	60 "	36 "	..	..
Horse Flesh ..	8,849 "	20,539 "	11,035 lbs.	8,240 lbs.
Fish .. ..	42,366 "	55,228 "	40,795 "	52,313 "
Shellfish .. ..	35,494 "	39,708 "	51,493 "	45,725 "
Vegetables .. ..	91,901 "	77,029 "	164,064 "	314,771 "
Fruit .. ..	11,796 "	21,583 "	18,034 "	91,594 "
Tinned goods ..	78,512 "	75,267 "	70,004 "	60,016 "
Cheese .. ..	..	180 "	..	..
Edible Fungi ..	..	..	..	24 lbs.
Bread and Cereals ..	10,254 lbs.	10,050 lbs.	23,513 lbs.	18,172 "
Flour .. ..	2,401 "	3,374 "	..	..
Biscuits .. ..	12,609 "	4,491 "	..	3,200 lbs.
Beans .. ..	..	..	..	1,210 "
Sundries .. ..	15,985 lbs.	12,095 lbs.	38,543 lbs.	7,250 "
Totals .. ..	708,932 lbs.	771,834 lbs.	803,354 lbs.	1,042,535 lbs.
No. of Eggs .. ..	592	80	64	976

**Shellfish.**—The condition of all shellfish coming into the city for sale continues to receive special attention. Sampling of mussels in the fish market is illustrated by the photograph opposite.

During the year 52 samples were taken of mussels exposed for sale in the wholesale market and were submitted to the Medical School for bacteriological examination. It was reported by the City Bacteriologist that two samples of mussels forwarded from places in this country and 25 forwarded from places in Eire were unsatisfactory. It will be seen that over 50 per cent. of the mussels coming into this city were found to contain bacillus coli in such quantity as to render them unfit for human consumption, and during the year 35,494 lbs. were condemned.

It was during the latter half of 1948 that the results of examination of batches of mussels consigned from Eire were reported as very unsatisfactory and unfit for human consumption. Persistent enquiries were then made to ascertain the layings and waters from

which these mussels came, and it presently appeared that several batches despatched from different towns in Eire had all been taken from the Drogheda layings, and all were reported as being unfit for human consumption. Accordingly it was decided that all further mussels coming from this source should be condemned forthwith upon arrival in Leeds. This course drew several letters of protest and enquiry from the consignors in Eire.

It was subsequently ascertained from the Meath County Council, Eire, that these mussels had been lifted from the sewage polluted waters of Drogheda Bay, which had been declared to be a prohibited area under the Public Health (Louth and Meath) Shellfish Layings Regulations, 1939. The sale for human consumption of mussels from this prohibited area was illegal, but their sale for "bait" only had been allowed. It was these prohibited polluted mussels that had been consigned to wholesalers in the Leeds Market "on commission" under plain label, no mention being made of "bait."

Full particulars of a number of batches were sent to the Medical Officer of Health of Meath for such action as was deemed necessary.

**Legal Proceedings with regard to illegal slaughtering.**—*Food and Drugs Act, 1938, Section 57.*—Proceedings were taken for slaughtering a pig on unlicensed premises and the defendant was found guilty and dismissed under the Probation of Offenders Act.

## DISEASES OF ANIMALS

**Tuberculosis Order of 1938.**—The table hereunder, which shows the number of bovines suspected to be affected with tuberculosis, and the action taken, is compiled from information supplied to the Local Authority by the Ministry of Agriculture and Fisheries.

No. of suspected animals reported or found.	No. affected with tuberculosis and slaughtered.	No. of animals found to be not amenable to the Order.
30	25	5

**Swine Fever Order of 1938.**—During the year 20 cases of suspected swine fever were notified, all of which were investigated by the Ministry of Agriculture and Fisheries. None of these cases was confirmed.

Under the above Order proceedings were taken against a pig-keeper for moving a pig from infected premises without a licence. The defendant was found guilty and dismissed under the Probation of Offenders Act.

**Regulation of Movement of Swine Order of 1922.**—Under this Order 176 licences for the disposal of 805 pigs from the Whitkirk Auction Mart were issued and 610 visits have been paid to pig-keeping premises to ascertain whether the recently removed store pigs were detained and isolated for the appropriate period.

**Anthrax Order of 1938.**—One case of suspected anthrax was reported but was not confirmed.

**Animals (Landing from Ireland, Channel Islands and Isle of Man) Order of 1933.**—During the year 2,018 Irish cattle were received under licence on direct purchase by the Ministry of Food for immediate slaughter at the Public Abattoir.

**Foot and Mouth Disease.**—No cases of this disease occurred in the city during the year, and the city was not affected by the various Orders made by the Ministry of Agriculture and Fisheries in connection with outbreaks of Foot and Mouth Disease in other parts of the country.

**Fowl Pest Order, 1936.**—During the year this disease was again very prevalent in many parts of the country, and in this city five suspected cases of Fowl Pest were reported. In two cases the outbreaks were confirmed by the Ministry of Agriculture and Fisheries. In both cases all domestic poultry on the premises were slaughtered. In one case the carcasses of four fowls and ten chickens were disposed of by burning at the Corporation Refuse Disposal Works and in the other case the carcasses of four diseased fowls and five fowls not affected were destroyed on the premises. In each case the premises were disinfected.

In accordance with the Ministry of Agriculture and Fisheries circular letter to Local Authorities dated 12th February, 1948, which stressed the desirability of bringing the dangers of Fowl Pest to the notice of poultry keepers, slides were purchased pointing out the dangers of Fowl Pest, and, with the helpful co-operation of the managements of 13 cinemas in the city, the slides were shown on the screens at each of these cinemas for one week.

**Live Poultry (Regulation of Sales, Exhibition and Movement) No. 2 Order, 1948.**—This Order came into operation on 7th June and Local Authorities were empowered to license under stringent conditions the holding of sales of domestic fowls, geese and ducks not intended for immediate slaughter. In this connection the Live Poultry Market in the Kirkgate Market, Leeds, was duly licensed for the holding of sales of poultry not for immediate slaughter. The restrictions were withdrawn as far as this city was concerned on 1st February, 1949.

### MILK SUPPLIES

**Dairy Farms, Dairies and Milk Sellers.**—The following tables show the number of registered dairy farms, dairies and milk sellers in the city on 31st December, 1948 :—

#### DAIRY FARMS AND COWKEEPERS.

	Dairy Farms	Cow- keepers
No. on register on 31st December, 1947 .. ..	113	109
No. added to the register during the year .. ..	1	2
No. removed from the register during the year .. ..	6	9
No. on register on 31st December, 1948 .. ..	108	102

#### DAIRIES AND RETAIL PURVEYORS OF MILK.

	Dairies	Retail Purvey- ors of milk
No. on the register on 31st December, 1947 (including 19 entries in respect of purveyors with premises in the surrounding County Area) .. ..	235	208
No. added to the register during the year .. ..	5	8
No. removed from the register during the year .. ..	16	16
No. on register on 31st December, 1948 (including 18 entries in respect of purveyors with premises in the surrounding County Area) .. ..	224	200

Proceedings were taken under Article 31 (2) of the Milk and Dairies Order, 1926, against a milk retailer for filling bottles in the street. The retailer was found guilty and fined £2.

Action was taken under Sub-section 1 of Section 22, Food and Drugs Act, 1938, with regard to a retail dairyman. The registration







DAIRY, WHITEGATE FARM, BRAMLEY

*Dairy structure at right-hand side too small. Floors, walls ceilings and roof defective. Milk churns stored on paved portion of yard near to steam boiler, manure shed adjoining, major portion of yard unpaved. Registration cancelled 16th June, 1948.*

of this dairyman as a retail purveyor of milk was cancelled for the following reasons :—(i) the quality of milk delivered during the previous two years had been unsatisfactory and (ii) the dairy structure was unsuitable for the retail trade of a dairyman. Some of the insanitary conditions cited in the list of reasons for removal from the register are shown in the photograph opposite.

**LICENCES ISSUED UNDER THE MILK (SPECIAL DESIGNATIONS)  
REGULATIONS, 1936-1946.**

Description of Licences.	Number in force on 31st December		
	1946	1947	1948
<b>To use the designation "Tuberculin Tested"—</b>			
1. To produce and bottle .. .. .	3	2	2
2. To produce, but not bottle .. .. .	1	1	1
3. To sell by retail .. .. .	15	13	54
4. To bottle and sell .. .. .	2	2	1
<b>To use the designation "Accredited"—</b>			
1. To produce and bottle .. .. .	5	5	1
2. To produce, but not bottle .. .. .	61	60	49
3. To sell by retail .. .. .	4	3	3
4. To bottle and sell .. .. .	..	..	..
<b>To use the designation "Pasteurised"—</b>			
1. Pasteurisers' Licences .. .. .	4	4	4
2. To sell by retail .. .. .	13	11	12

During the year three producers of Accredited milk had their licences revoked by the licensing authority on the grounds that samples of milk taken during the year had habitually failed to pass the prescribed tests. In one case the producer appealed to the Ministry of Health against the Corporation's decision and the Ministry dismissed the appeal.

**Dairy Inspection and Milk Sampling.**—The following visits were paid during the year by the Food and Drugs Inspectors and Cowshed and Dairies Inspector :—

To dairies .. .. .	2,842
To cowsheds .. .. .	1,811
To railway stations .. .. .	31
To farms or dairies <i>re</i> infectious disease .. .. .	1
To foodshops and bottled milk stores .. .. .	147

During the year 2,666 samples of milk were submitted to the Departmental Laboratory for bacteriological examination. The samples were taken from the following grades of milk :—

" Tuberculin Tested "	..	..	..	..	123
" Accredited "	..	..	..	..	1,330
" Pasteurised "	..	..	..	..	349
" Heat Treated "	..	..	..	..	54
" Sterilised "	..	..	..	..	47
" Ungraded "	..	..	..	..	763

Samples were taken at farms and distributing centres ; in course of delivery ; at local institutions and from road vehicles used for the conveyance of milk. The accompanying tables give detailed information of the results of the tests applied.

#### METHYLENE BLUE (REDUCTION) TEST.

Designation		Total Samples Taken	Result of Test			
			Satisfactory		Unsatisfactory	
			No.	Percent- age	No.	Percent- age
*Pasteurised	{ Dairies ..	188	186	98·9	2	1·1
	{ Schools ..	44	44	100·0	..	..
	{ Day Nurseries	177	115	98·3	2	1·7
*Sterilised ..	.. ..	47	47	100·0	..	..
*Heat Treated ..	.. ..	54	47	87·0	7	13·0
†Tuberculin Tested	{ City ..	84	76	90·5	8	9·5
	{ Outside Producers	39	22	56·4	17	43·6
	{ .. ..	1,330	1,104	83·0	226	17·0
†Accredited ..	.. ..	1,330	1,104	83·0	226	17·0
†Ungraded	{ City ..	745	462	62·0	283	38·0
	{ Outside Producers	18	10	55·6	8	44·4
	{ .. ..	18	10	55·6	8	44·4

\*Satisfactory samples not to decolourise Methylene Blue at 37°C. in 30 minutes.

† Satisfactory samples not to decolourise Methylene Blue at 37°C. in 4½ hours, May to October, or 5½ hours, November to April.

#### PHOSPHATASE TEST.

Designation		Total Samples Taken	Result of Test			
			Satisfactory		Unsatisfactory	
			No.	Percent- age	No.	Percent- age
Pasteurised	{ Dairies ..	188	188	100·0	..	..
	{ Schools ..	44	44	100·0	..	..
	{ Day Nurseries*	117	85	72·7	32	27·3
Sterilised ..	.. ..	47	47	100·0	..	..
Heat Treated ..	.. ..	54	50	92·6	4	7·4

Satisfactory samples not to give colour reading of more than 2·8 Lovibond Blue Units.

\*These milks were taken at the various Day Nurseries in the city. The milk was produced at a farm in the city and arrangements had been made for this milk supply to be pasteurised, but during a certain period of the year it appeared that the milk had not been pasteurised which accounted for these unsatisfactory results of the Phosphates Test. The matter was taken up with the farm concerned, and at the present time the milk is being satisfactorily pasteurised and it is very unlikely that it will happen again.

## COLIFORM TEST

Designation	Total Samples Taken	Result of Test				
		Satisfactory		Unsatisfactory		
		No.	Percent- age	No.	Percent- age	
Tuberculin Tested	City ..	84	74	88.1	10	11.9
	Outside Producers	39	29	74.4	10	25.6
Accredited .. .. .	1,330	1,110	83.5	220	16.5	

Bacillus Coli must be absent in 2 out of 3 tubes of 1 m.l. 1/100 dilution of milk for the sample to be regarded as satisfactory.

**Biological Test.**—During the year 402 samples of milk were submitted to the City Bacteriologist for biological examination for the presence of tubercle bacilli. The results are shown in the following table:—

Designation	Total Samples Taken	Result of Test			
		Positive		Negative	
		No.	Percentage	No.	Percentage
Tuberculin Tested ..	23	..	..	23	100.0
Accredited .. .. .	103	3	2.9	100	97.1
Pasteurised .. .. .	10	..	..	10	100.0
Ungraded .. .. .	266	2	0.8	264	99.2
Total .. .. .	402	5	1.2	397	98.8

## FOOD AND DRUGS

Mr. J. S. Lindley, the Supervisory Inspector, reports that the Sampling Officers took 1,312 formal and 11 informal samples of milk, 161 formal and 60 informal samples of other foods or drinks and 6 formal and one informal samples of drugs.

Administrative action was taken in all cases where the samples were found to be adulterated or deficient. If the adulteration or deficiency, though appreciable, was a first offence, a warning letter was sent. Subsequent serious cases were dealt with by prosecution and the results of summonses issued under the Food and Drugs Act, 1938, during the year are shown in the table on pages 121 and 122.

**Fertilisers and Feeding Stuffs Act, 1936.**—During the year, 14 samples of fertiliser (five formal and nine informal) and one informal sample of feeding stuffs were taken under the above-mentioned Act and submitted to the Agricultural Analyst for examination. Two informal samples of fertiliser were unsatisfactory.

**Rag Flock Acts, 1911 and 1928.**—No samples were taken under the above-mentioned Acts during the year.

**Pharmacy and Poisons Act, 1933 (Part II).**—The administrative year for the purpose of the above-mentioned Act is the period 1st May to 30th April. The following table gives a detailed summary of the work done during the year ended 30th April, 1949.

Persons on the List on 30th April, 1948 .. .. .	337
Persons added to the List during the year .. .. .	88
Persons removed from the List during the year .. .. .	32
Persons on the List on 30th April, 1949 .. .. .	393
Premises on the List on 30th April, 1948 .. .. .	482
Premises added to the List during the year .. .. .	91
Premises removed from the List during the year .. .. .	29
Premises on the List on 30th April, 1949 .. .. .	544
Visits paid to :—	
1. Listed Premises in connection with new applications .. .. .	88
2. Listed Premises in connection with unpaid fees .. .. .	8
3. Listed Premises for routine inspection .. .. .	85
4. Unlisted Premises .. .. .	28
Contraventions :—	
Persons found to be selling Part II Poisons on Unlisted Premises .. .. .	26
Listed Sellers found with incorrectly labelled Part II Poisons in stock .. .. .	1
Contraventions dealt with :—	
Persons ceasing to sell Part II Poisons from Unlisted Premises .. .. .	13
Persons selling Part II Poisons from Unlisted Premises who subsequently applied for listing .. .. .	13
Listed Sellers who have corrected labels found to be not in accordance with requirements as to labelling .. .. .	1

**Pharmacy and Medicines Act, 1941.**—No contraventions have come to the notice of the Department during the year.

SUMMONSES ISSUED DURING 1948, UNDER THE FOOD AND  
DRUGS ACT, 1938.

No. of Sample	Article.	Adulteration or Deficiency.	Result of Hearing.
108L	Milk	16.0% deficient in fat ..	Fined £2. Retailer.
163L	Milk	7.0% of added water ..	Fined £4 and ordered to pay 7s. costs. Producer.
164L	Milk	9.0% of added water ..	
169L	Milk	3.5% of added water ..	
170L	Milk	3.5% of added water ..	
183L	Milk	11.0% of added water ..	Dismissed under the Probation of Offenders Act on payment of £1 9s. costs. Producer.
184L	Milk	10.6% of added water ..	
192L	Milk	4.5% of added water ..	Fined £2. Producer.
222L	Milk	16.0% of added water ..	Fined £10. Producer.
331L	Dressed Crab	50.0% deficient in meat content .. ..	Fined £1 and ordered to pay £2 costs. Retailer.
410L	Milk	8.0% of added water and 3.3% deficient in fat ..	Fined £4. Producer
411L	Milk	12.0% of added water ..	
485L	Milk	21.0% deficient in fat ..	Fined £2. Retailer.
602L	Milk	3.5% of added water ..	Fined £15. Producer.
603L	Milk	3.7% of added water and 3.3% deficient in fat ..	
604L	Milk	4.0% of added water ..	
671L	Malt Vinegar	This is not a Malt Vinegar but an artificial non-brewed product. Label reads "Distilled Pure Malt Vinegar," accordingly the label is false in this particular case ..	Fined £10 in each case. Wholesalers.
685L	Distilled Pure Malt Vinegar	This is not a pure malt vinegar but an inferior substitute .. ..	



SUMMONSES ISSUED DURING 1948, UNDER THE FOOD AND  
DRUGS ACT, 1938—continued.

No. of Sample	Article	Adulteration or Deficiency	Result of Hearing
799L	Milk	22.0% of added water and 46.7% deficient in fat ..	} Fined £2 in each case. Producer.
800L	Milk	15.0% of added water ..	
811L	Milk	20.0% of added water and 43.3 deficient in fat ..	
812L	Milk	20.0% of added water ..	
836L	Milk	29.0% of added water and 10.0% deficient in fat	Fined £2. Producer.
838L	Milk	30.0% of added water and 12.0 deficient in fat ..	} Fined £3 in each case. Producer.
839L	Milk	12.0% of added water ..	
843L	Milk	27% of added water ..	
844L	Milk	29.0% of added water and 5.0% deficient in fat ..	
851L	Crushed Almonds	60.0% deficient in oil ..	Fined £5. Retailer.
963L	Milk	15.0% of added water ..	} Case adjourned for 12 months. Producer's employee.
965L	Milk	8.3% of added water ..	
966L	Milk	14.5% of added water ..	
993L	Milk	4.4% of added water ..	} Fined £5 on No. 993L. Dismissed under the Probation of Offenders Act on 996L.
996L	Milk	4.4% of added water ..	
1020L	Salad Cream	51.8% deficient in egg yolk solids.	Case dismissed.
1033L	Salad Cream	64.4% deficient in egg yolk solids.	Case withdrawn.
1057L	Milk	6.5% of added water. ..	Fined £2. Producer.
73F	Beef Sausage	30.0% deficient in meat content.	Fined £5. Retailer.
286F	Whale Meat sausage	50.0% deficient in meat content	Fined £10 and ordered to pay £2 2s. costs. Manufacturer.
295F	Cooking Fat	Consisted of 100% White Vaseline. This sample is not a fat and possesses no food value .. ..	Case dismissed. Retailer.





*Dark underground kitchen, taken by flash-light, showing dilapidated stove, defective ceiling, worn floor, lack of natural light and ventilation, and general insanitary conditions.*



*Kitchen transferred to Ground Floor. Room showing Tiled Walls, Terazzo Floor. New equipment and hot and cold water for the washing of hands.*

## ICE-CREAM, FOOD PREPARATION AND STORAGE PREMISES

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During the year 7,026 visits were paid to premises used for the sale, storage or manufacture and preparation of foodstuffs.

The arrangement between the Food Office and this Department, whereby licences for the establishment of new canteens and cafes are not granted until the premises have been made to comply with this Department's requirements, has continued to operate satisfactorily. During the year 79 inspections of such premises have been made and 26 new food preparing establishments have been opened. In all cases these premises are properly equipped and comply with our requirements.

In addition, pressure has been brought to bear upon the occupiers of several sub-standard food preparing establishments, and improvements have been effected in twelve instances—in most cases, these improvements constituted a complete re-organisation and re-equipment of the kitchens. An example of the work done in this respect is shown in the accompanying photographs. In this case, action by the Department secured the removal of an underground kitchen to a fresh site on ground level.

Two complaints of special interest were received during the year. In one, a complaint from a canteen of an "iodine" taint in cooked foodstuffs was found to be due to a leakage of refrigerant into the storage chamber of the refrigerator. In the second case, a batch of pastry was condemned owing to a grey discolouration due to wrong alignment of a mechanical mixer, which allowed the mixing arm to rub on the metal bowl and so scrape off particles of metal. In both cases suitable action remedied the trouble.

**Ice-Cream Premises.**—During the year 978 visits were paid to ice-cream premises and progress continued in dealing sympathetically with those found unsuitable. Eight ice-cream manufacturing premises were reported to the Local Authority as being unsuitable for the purpose, in five instances the registrations were granted after the applicants had appeared before the Committee and submitted proposals for carrying out structural works of improvement to the premises and the installation of proper machinery and equipment. In one of these cases the business was established on a fresh site in new premises. Three ice-cream manufacturers who

appeared before the Committee with regard to the unsuitability of their premises failed to satisfy the Local Authority and their registrations were refused or cancelled. In one case an application for registration for the sale of ice-cream was refused.

**Fish Frying Premises.**—The number of visits paid to registered fish frying premises was 1,031. Twenty-three applicants were granted registrations subject to the carrying out of works. In two cases where the premises were unsuitable the applicants were required to appear before the Committee, one of these submitted plans and specifications showing proposed improvements to the premises. These proposals were accepted and registration was granted subject to the carrying out of the works. In the other case, situated at No. 73 East Street, the premises could not be made suitable and the application for registration was refused. The photograph opposite illustrates some of the respects in which these premises did not satisfy the requirements of Section 13, or were otherwise unsuitable for registration.

**Other Registered Food Preparing Premises.**—252 visits were paid to other registered food preparing premises such as those used for the preparation of pickles, sauces, jams, sausages and pork products and meat pies. Where the premises failed to comply with Section 13 of the Food and Drugs Act, notices were served or when other defects were found persuasive methods were used to effect their remedy. In two cases it was found that the preparation of preserved food was being carried on in premises unsuitable for registration and the occupiers of these premises were required to appear before the Local Authority; in one of these cases the occupier submitted plans and specifications of works of improvement which were accepted; in the other case, the premises could not have been made suitable for registration and registration was refused.

It was necessary to serve 116 informal notices in respect of premises contravening the law, and in two instances, statutory notices had to be served.

Statistical particulars with regard to registration of premises under Section 14 of the Food and Drugs Act, 1938, are set out in the following table :—





NO. 73, EAST STREET

*Showing external view of insanitary rear room used for the preparation of fish and potatoes for frying. Drainage from potato-washer discharged on to street surface. Walls defective, roof defective, no ceiling, water-closet ventilated into room. Application for registration refused 15 December, 1948. Business now closed.*





## REGISTRATION.

Number of premises registered for the manufacture of ice-cream during 1948 .. .. .	8
Number of premises registered for the sale of ice-cream during 1948 .. .. .	216
Number of premises registered for the preparation or manufacture of sausages or potted, pressed, pickled or preserved food intended for sale .. .. . (23 fried fish shops, 4 manufacturers of sausages, potted meat, meat pies, etc.)	27
Number of notifications of change of occupier received :—	
ice-cream premises .. .. .	14
food preparing places .. .. .	14
Number of registrations cancelled—ice-cream manufacturing premises .. .. .	2
Number of premises removed from register :—	
Ice-cream premises (manufacture) .. .. .	2
Ice-cream premises (sale) .. .. .	13
Number of premises on the register 31st December, 1948 :—	
(a) used for manufacture for sale of ice-cream.. ..	128
(b) used for the sale of ice-cream .. .. .	628
(c) used for the storage of ice-cream intended for sale	3
(d) used for the manufacture of sausages, or preparation of preserved food .. .. .	505

**Ice-cream Sampling.**—During the year 177 samples of ice-cream were taken from the places of manufacture or from local vendors for bacteriological examination. It is gratifying to note that the number of satisfactory samples is roughly 10·0 per cent. higher than in 1947. All the laboratory results were communicated to the ice-cream manufacturers. When the laboratory result showed an unsatisfactory ice-cream, a special follow-up visit was made by the district sanitary inspector to advise on improved methods. Most frequently the cause of bad results has been found to be the inadequate cleansing of plant or utensils and inefficient sterilisation.

The results are shown in the following tables :—

METHYLENE BLUE TEST.

Grade	No. of Samples	Percentage	Remarks
1	55	31·1	Good
2	47	26·6	Satisfactory
3	36	20·3	Unsatisfactory
4	39	22·0	Very unsatisfactory

BACTERIAL COUNT.

Organisms per m.l.	No. of samples	Percentage	Remarks
Under 10,000 ..	46	25·9	Good
10,000-100,000 ..	61	34·5	Satisfactory
100,000-1,000,000 ..	52	29·4	Unsatisfactory
Over 1,000,000 ..	18	10·2	Very unsatisfactory

COLIFORM TEST.

Bacillus Coli	No. of samples	Percentage	Remarks
Absent in $\frac{1}{10}$ th m.l. ..	83	46·9	Good
Present in $\frac{1}{10}$ th m.l. ..	26	14·7	Satisfactory
Present in $\frac{1}{100}$ th m.l. ..	23	13·0	Unsatisfactory
Present in $\frac{1}{1000}$ th m.l.	45	25·4	Very unsatisfactory

It can be seen from these tables that the results of the examination of ice-cream by the Methylene Blue Test, by the Plate Count and the Coliform Tests in general gave comparable results, but this was not so in all cases because two samples having a plate count of less than 100,000 bacteria per m.l. and Bacillus Coli absent in a dilution of 1/100th m.l. were placed by the Methylene Blue Test in Grade III. Six other samples having a Plate Count less than 100,000 bacteria per m.l. and Coliform absent in a dilution of 1/10th m.l. were placed by the Methylene Blue Test in Grades III or IV.

## FACTORIES

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NOTE :—This Section of the Report is headed “ Factories,” but in fact, deals also with Workplaces (including Offices) and Shops.

**Factories.**—During the year 3,595 visits were paid to factories in the city. In the course of these visits, 1,136 contraventions of the Factories Act, 1937 and 1948, were noted and 772 written notices were served requiring action to be taken to remedy defects.

The year has been chiefly remarkable for a considerable increase in the number of complaints of nuisance from noise originating from factories. Visits were paid to the offending firms' premises whenever such complaints were received, although in each case the complainants were informed that the Local Authority possessed no legal powers to deal with such nuisances. In most instances the offenders were amenable to representations from this Department, and a good deal of useful work was done in abating nuisances of this type. I am of the opinion, however, that the time is now ripe for the inclusion of noise nuisances in the list of statutory nuisances set out in the Public Health Acts, so that more positive action could be taken in case of need.

During the year 529 visits were paid to premises where home-work was carried on. In two instances Inspectors discovered home-work being done in unwholesome premises, and in both cases informal action was taken to ensure that no further work was given out. Two cases of scarlet fever occurred in outworkers' premises during the year. With the return of more normal conditions of employment the steady fall in the number of outworkers from the high figure noted in the years immediately following the war has continued, to the extent that the total number of outworkers (including contractors) in the August returns fell from 1,164 in 1947 to 782 in 1948.

Mr. J. Wyatt, the Supervisory Factories Inspector, reports on the work of the Section in the four following tables, the first three being taken from the return which is sent annually to the Ministry of Labour and National Service.

**Workplaces.**—During the year 764 inspections of workplaces (including offices) were made. Generally speaking, conditions in these workplaces were found to be reasonably satisfactory and in

44 cases only was it found necessary to serve notices for defects to be remedied. These notices, comprising preliminary and statutory notices under the Public Health Acts, resulted in the following improvements being carried out :—

Rooms ventilated .. .. .	7
Overcrowding abated .. .. .	1
Rooms cleansed .. .. .	5
Sufficient conveniences provided .. .. .	31

One or two complaints were also received about offices which were without washing facilities. This again is a matter which cannot be dealt with under existing legislation. However, verbal representations by Inspectors resulted in washing facilities being provided.

**Shops.**—The total number of shops inspected was 738. Preliminary notices and statutory notices under the Shops Act, 1934, were served in order to deal with defects found during these inspections. The following is a summary of the improvements which were secured during the year :—

Shops ventilated .. .. .	4
Reasonable temperature secured .. .. .	2
Sufficient conveniences provided .. .. .	15
Lighting provided .. .. .	2
Washing facilities provided .. .. .	4
Meals facilities provided .. .. .	4
Other defects remedied .. .. .	51

No applications were made during the year for exemption from the obligation to provide washing facilities and sanitary conveniences in shops.

#### INSPECTIONS FOR PURPOSES OF PROVISIONS AS TO HEALTH (INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS)

Premises	Number on Register	Number of		
		Inspections	Written Notices	Prosecutions
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by the Local Authority .. .. .	622	294	38	..
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority .. .. .	3,080	3,290	734	..
(iii) Other premises in which Section 7 is enforced by the Local Authority (excluding out workers' premises) .. .. .	1	11	..	..
Total .. .. .	3,703	3,595	772	..

## CASES IN WHICH DEFECTS WERE FOUND

Particulars	No. of Cases in which defects were found		Referred		No. of cases in which prosecutions were instituted
	Found	Remedied	To H.M. Inspector	By H.M. Inspector	
Want of cleanliness (S. 1) ..	7	7	..	3	..
Overcrowding (S. 2) ..	..	..	..	..	..
Unreasonable temperature (S. 3) ..	..	..	..	..	..
Inadequate ventilation (S. 4) ..	..	1	..	..	..
Ineffective drainage of floors (S. 6) ..	2	3	..	..	..
Sanitary Conveniences (S. 7)—					
Insufficient ..	64	46	..	12	..
Unsuitable or defective ..	933	657	..	52	..
Not separate for sexes ..	118	185	..	17	..
Other offences against the Act (not including offences relating to Outwork) ..	12	..	12	..	..
Total ..	1,136	899	12	84	..

## OTHER MATTERS.

	Number of		
	Lists.	C.	W.
Homework :—			
List of Outworkers (S. 110) :—			
Lists received twice in the year ..	376	481	1,672
„ once in the year ..	8	6	113
Addresses of } received from other Authorities ..			223
outworkers } forwarded to other Authorities ..			108
Notices to occupiers as to keeping or sending lists ..			362
Prosecutions.. ..			..
Inspection of Homeworkers' premises ..			529
Homework in unwholesome premises :—			
Instances ..			2
Notices (S. 111) ..			..
Prosecutions.. ..			..
Homework in infected premises :—			
Instances ..			2
Orders made } Public Health Act, 1936 (S. 153) ..			..
Prosecutions }			..
[Infectious cases—2 scarlet fever.]			
Matters notified to H.M. Inspectors of Factories :—			
Failure to affix Abstract of the Factories Act 1937 (S. 128) ..			12
Action taken in matters referred by { Notified by H.M. Inspector ..			..
H.M. Inspectors ..			..
			..
			..
Total number of factories on Register ..			3,702
The above total includes 239 bakehouses.			



## OUTWORK

## Section 110 and 111.

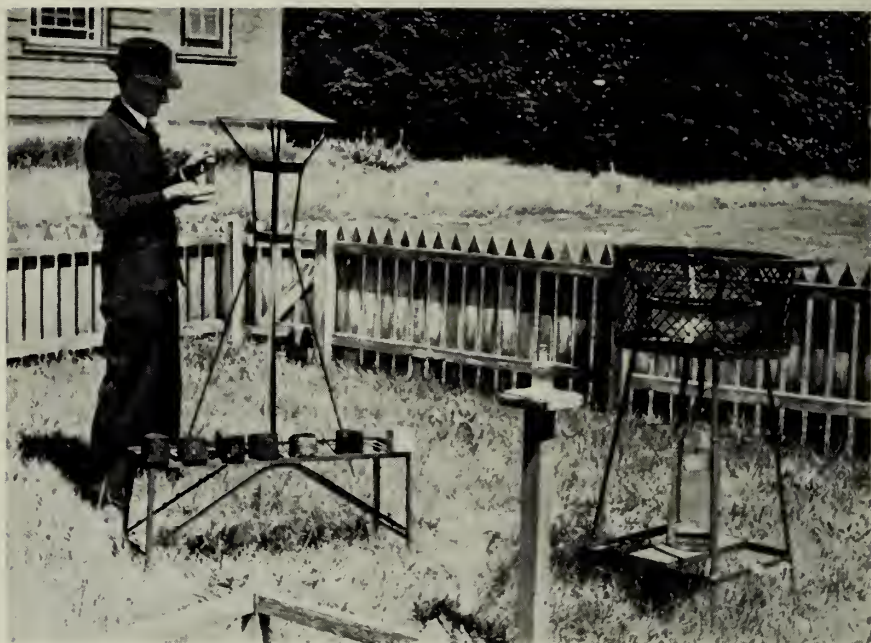
Nature of Work	SECTION 110			SECTION 111		
	No. of out-workers in August list required by Sect. 110(1)(c)	No. of cases of default in sending lists to the Council	No. of prosecutions for failure to supply lists	No. of instances of work in unwholesome premises	Notices served	Prosecutions.
Wearing apparel :—						
Making, etc. ..	712	..	..	2	..	..
The making of boxes or other receptacles or parts thereof made wholly or partially of paper ..	24	..	..	..	..	..
Carding, etc. of buttons ..	7	..	..	..	..	..
Cosaques, Christmas crackers, Christmas stockings, etc. ..	27	..	..	..	..	..
Textile weaving ..	12	..	..	..	..	..
Total ..	782	..	..	2	..	..

## SMOKE ABATEMENT

Statistics relating to atmospheric pollution in the city have not appeared in the Annual Report since 1938. During the period of the recent war, publication was discontinued because of the need to conserve paper. Records taken in the war period are somewhat misleading, having regard to the abnormal conditions then prevailing and to official instructions in the earlier war years that the emission of smoke be encouraged in order that our cities might be rendered less visible to hostile aircraft.

In perusing the records taken in the post-war years it must be borne in mind that the difficulties experienced in securing the supply of suitable and satisfactory fuels, and new or alternative fuel-burning appliances, have a bearing on the information secured,





ATMOSPHERIC POLLUTION STATION, HEADINGLEY  
*Lead Peroxide Cylinder, Potassium Iodide Bottle and Deposit Gauge.*



BOILER PLANT INSPECTION  
*Inspector noting method of hand firing employed.*

During 1946 it was decided to increase the Department's facilities for the ascertainment of the degree of atmospheric pollution. In August of that year the number of atmospheric pollution stations was increased from four to six and all stations were equipped with apparatus to record the extent of sulphur pollution by the lead peroxide method. The recording of daylight by the potassium iodide method was extended to all six stations in January, 1947.

The photograph reproduced opposite shows the apparatus in use at each atmospheric pollution station. On the right is the Deposit Gauge, the cylinder of the Lead Peroxide Instrument is being examined and in the centre foreground is the Potassium Iodide Bottle.

In addition to the permanent stations, an additional Deposit Gauge is in use for experimental purposes, i.e. it is exposed for varying periods in different situations as a check on local conditions. During 1945 it was sited in the vicinity of the Kirkstall Power Station, whose deposits ranging from 15 tons to 73 tons per square mile per month were recorded, the monthly average being 41 tons. From April, 1946, to August, 1947, the gauge was exposed in the Roundhay district and during this period the recorded monthly deposit ranged from 4.75 tons to 19.69 tons per square mile, the monthly average being 10 tons.

During the month of November, 1948, there was a continuous period of fog lasting eleven days ; this caused a considerable increase in the sulphur pollution and a lesser but definite increase in the weight of solids deposited. These effects can be seen at a glance quite clearly by referring to the graphs opposite pages 132 and 133.

The standard instruments used and the methods adopted are those prescribed by the Department of Scientific and Industrial Research, which Department undertakes the work of co-ordinating the observations made by Local Authorities throughout the country. These instruments are the only ones available at present for the purpose of recording atmospheric pollution and, this being so, provided the records obtained are continuous, it is felt that they are of value.

The following table shows the work of the Sanitary Inspectors in connection with smoke abatement during the years 1947 and 1948.

	1947	1948
Smoke Observations .. .. .	144	123
Grit Deposit Records .. .. .	49	5
Boiler Plant Inspections .. .. .	109	65
Visits for enquiry .. .. .	525	351
Furnaces newly provided .. .. .	—	5
Furnaces altered, repaired or renewed ..	13	2
Chimneys newly erected .. .. .	—	7
Chimneys extended or improved ..	1	—
Firms adopting smokeless fuel .. .. .	—	—
Notices served .. .. .	6	1

The photograph opposite page 131 shows an Inspector noting the method of hand firing adopted whilst carrying out a boiler-plant inspection.

*Estimation of Atmospheric Sulphur Pollution by the Lead Peroxide Method.*—The table on page 133 gives the estimation of sulphur compounds in the atmosphere for the years 1947 and 1948. The station showing the highest monthly average during 1948 was City Centre (4.29) and that with the lowest Temple Newsam (2.72). Comparison with 1947 shows that increases were recorded at all stations.

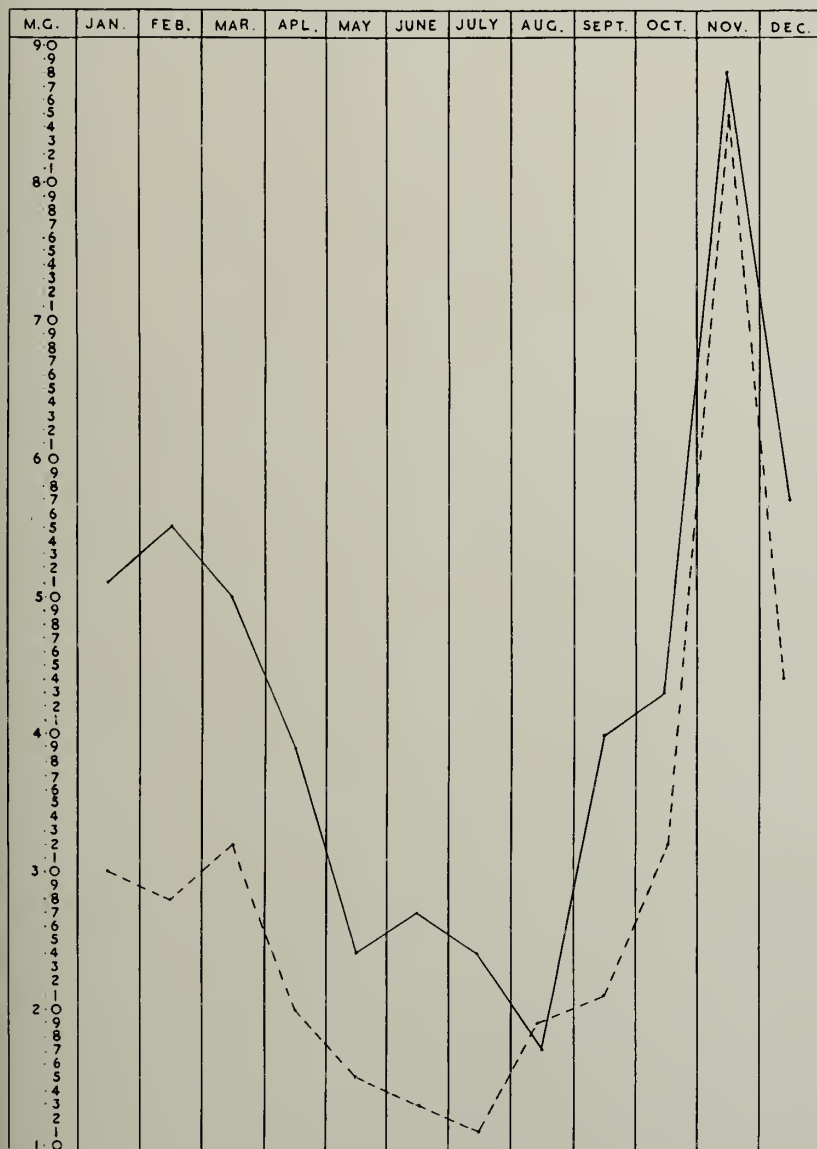
*Daylight.*—The table on page 134 shows the amount of daylight registered during 1947 and 1948. The station at which was recorded the highest monthly average during 1948 was St. James's Hospital (5.53) and the lowest was Headingley (4.30).

*Deposit Gauges.*—The table on page 135 shows the monthly deposit of solids from the atmosphere in tons per square mile for the years 1947 and 1948. The station with the highest monthly average during 1948 was City Centre (28.16) and the lowest Temple Newsam (12.24). For purposes of comparison the solids deposited in an industrial area (City Centre) and a residential area (Headingley) are shown in graph form opposite page 133.

The table on page 136 shows the yearly records from 1926 to 1948 of the deposit of solids from the atmosphere in tons per square mile.

# SULPHUR EMISSION 1948.

AMOUNT OF  $\text{SO}_3$  IN MILLIGRAMMES PER DAY PER 100 SQUARE CENTIMETRES.



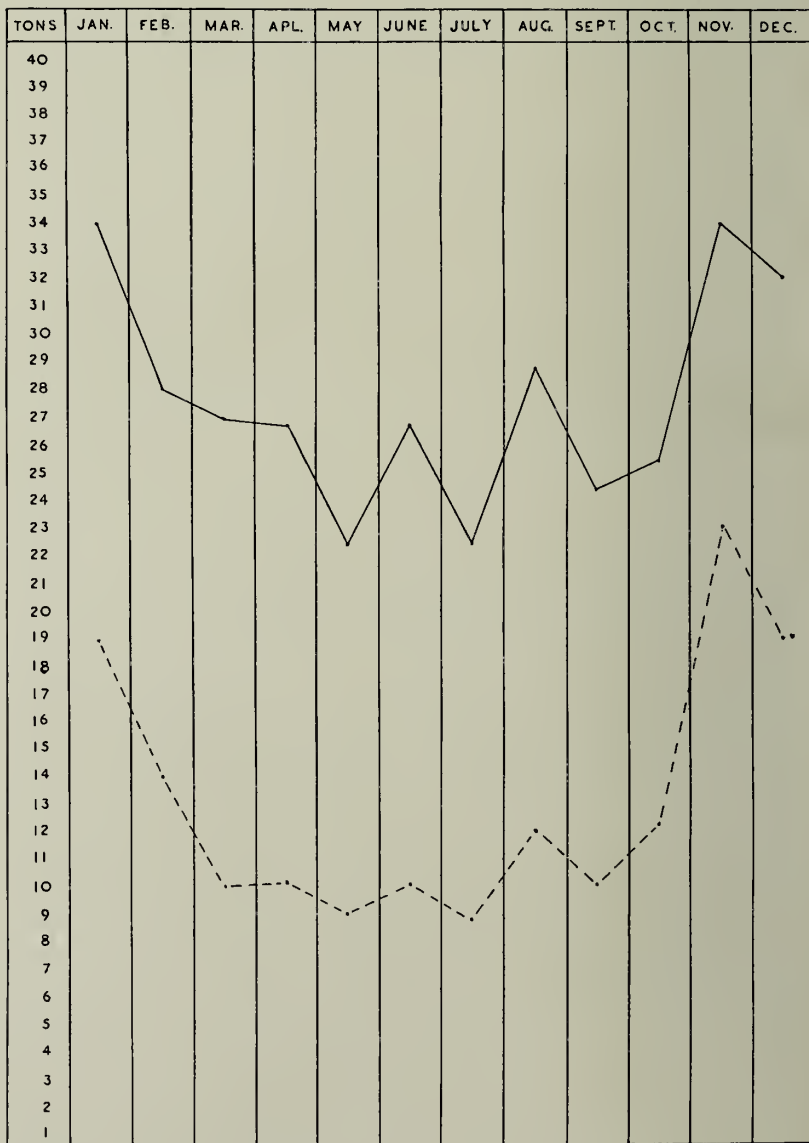
CITY CENTRE —————

HEADINGLEY - - - - -



# SOOT DEPOSIT 1948.

TONS PER SQUARE MILE \_\_\_\_\_ PER MONTH



CITY CENTRE \_\_\_\_\_

HEADINGLEY - - - - -

# ESTIMATION OF ATMOSPHERIC SULPHUR POLLUTION BY LEAD PEROXIDE METHOD.

(Weight of SO<sub>3</sub> calculated per 100 square centimetres of exposed fabric in milligrammes per day.)

Period.	STATIONS.									
	Headingley		City Centre		Hunslet		Temple Newsam		Armley Park	
	1947	1948	1947	1948	1947	1948	1947	1948	1947	1948
January ..	..	3.04	4.40	5.18	3.91	..	2.62	3.30	4.58	4.68
February ..	1.77	2.86	3.70	5.50	3.87	4.84	1.42	1.90	5.90	4.35
March ..	2.08	3.26	4.25	5.01	3.77	3.91	2.60	3.36	3.28	4.25
April ..	1.57	2.06	3.13	3.90	1.62	3.15	2.00	2.16	3.06	2.94
May ..	1.52	1.50	2.34	2.40	2.37	2.30	1.65	1.50	2.20	2.20
June ..	1.53	1.36	2.45	2.70	2.41	2.34	1.40	1.45	1.72	2.31
July ..	1.36	1.12	2.20	2.40	1.52	1.70	1.52	1.40	1.72	1.80
August ..	1.31	1.90	1.49	1.70	1.70	2.70	1.03	1.80	0.70	2.75
September ..	1.74	2.10	2.73	4.00	2.22	2.50	1.88	2.60	1.98	2.90
October ..	2.09	3.20	4.18	4.30	3.89	3.30	2.05	3.00	3.11	3.50
November ..	3.19	8.50	5.80	8.80	4.09	7.70	3.10	6.90	3.71	8.00
December ..	..	4.40	4.99	5.70	4.29	4.70	3.33	3.30	3.92	4.90
Monthly Average	1.82	2.94	3.47	4.30	2.97	3.27	2.05	2.72	2.99	3.72
									2.76	3.86

TABLE SHOWING AMOUNT OF DAYLIGHT FOR THE YEARS 1947 AND 1948.  
(Value expressed as Milligrammes of Iodine liberated by the action of daylight on a mixture of dilute Sulphuric Acid and Potassium Iodide Solution—Daily Average.)

Period.	STATIONS.											
	Headingley		City Centre		Hunslet		Temple Newsam		Armley Park		St. James's Hospital	
	1947	1948	1947	1948	1947	1948	1947	1948	1947	1948	1947	1948
January ..	2.39	1.88	2.15	1.84	2.74	1.94	2.68	2.31	2.80	2.32	2.64	2.15
February ..	4.32	3.34	3.90	3.33	3.79	3.52	4.00	3.82	4.17	3.48	3.39	4.10
March ..	4.99	4.30	4.21	4.70	4.95	4.20	4.41	5.10	4.66	5.00	4.96	5.30
April ..	7.69	6.22	7.86	6.40	8.46	6.30	7.30	6.41	9.25	7.72	7.80	7.37
May ..	5.79	6.84	6.75	6.77	7.85	7.05	6.28	7.61	7.68	7.49	8.14	8.86
June ..	8.45	6.72	8.36	6.90	7.72	7.07	8.43	7.95	9.60	7.73	9.22	8.55
July ..	7.53	7.06	7.01	7.28	7.62	8.25	7.56	8.90	8.64	8.08	7.76	8.30
August ..	7.97	5.12	7.97	6.21	7.02	6.42	8.05	6.70	8.97	6.51	9.05	7.00
September ..	8.92	4.11	8.35	5.15	8.40	5.97	8.26	4.77	10.46	5.90	9.76	6.60
October ..	6.98	3.23	6.45	3.92	6.88	4.26	8.89	3.87	6.92	4.32	7.70	4.55
November ..	2.57	1.88	2.57	1.74	2.85	2.04	3.26	2.43	3.41	2.26	3.31	2.19
December ..	2.04	0.90	1.66	1.00	1.85	1.40	2.23	1.10	2.26	1.40	2.23	1.40
Monthly Average	5.80	4.30	5.60	4.60	5.84	4.87	5.94	5.08	6.57	5.18	6.33	5.53

MONTHLY DEPOSIT IN ENGLISH TONS PER SQUARE MILE.  
YEARS 1947 AND 1948.

Period.	STATIONS.											
	Headingley		City Centre		Hunslet		Temple Newsam		Armley Park		St. James's Hospital	
	1947	1948	1947	1948	1947	1948	1947	1948	1947	1948	1947	1948
January ..	14.25	19.30	18.04	34.32	13.50	23.12	10.40	14.65	18.82	32.83	15.84	28.38
February ..	11.30	14.28	9.37	28.84	†	19.62	7.35	12.62	†	32.51	†	23.32
March ..	19.37	10.17	29.70	27.53	27.40	14.10	12.28	10.55	67.22	20.34	16.92	19.29
April ..	*	10.64	31.90	27.10	33.20	17.56	17.60	11.35	39.07	18.40	31.20	16.13
May ..	28.61	9.63	23.23	22.85	18.20	16.14	14.02	10.31	29.32	29.75	16.32	13.04
June ..	*	10.67	24.42	27.16	17.03	16.16	13.37	11.25	21.46	26.05	14.47	13.59
July ..	11.76	9.34	27.58	22.97	14.54	18.86	12.17	13.51	28.45	21.94	17.82	12.14
August ..	6.56	12.88	16.53	29.47	15.97	21.33	14.96	13.00	34.16	46.85	6.90	15.45
September ..	11.11	10.03	25.61	24.94	19.13	14.30	16.02	12.68	21.16	16.26	14.92	14.40
October ..	*	12.48	22.14	25.91	18.93	15.20	11.14	9.49	33.30	16.80	13.17	15.88
November ..	9.56	23.38	27.93	34.57	14.20	18.60	7.81	†	19.70	41.45	15.44	20.92
December ..	9.42	19.98	32.31	32.36	17.56	18.50	12.00	15.27	54.40	24.38	20.13	18.66
Total deposit for year ..	121.94	162.78	288.76	338.02	209.66	213.49	149.12	134.68	367.06	327.56	183.13	211.20
Monthly Average	13.55	13.57	24.06	28.17	19.06	17.79	12.43	12.24	33.37	27.30	16.65	17.60

\* Gauge interferred with.

† Gauge broken by frost.

DEPOSIT GAUGES RECORDS, 1926-1948.  
ENGLISH TONS PER SQUARE MILE PER ANNUM.

Year.	STATIONS.					
	Headingley	City Centre	York Road	Hunslet	Temple Newsam	Armley Park
1926	98.02	307.70	*288.10	362.80	..	..
1927	..	354.50	391.90	501.20	..	..
1928	..	349.50	319.20	304.30	¶61.20	..
1929	..	321.00	302.60	305.40	†80.40	..
1930	..	344.30	299.50	290.50	101.80	..
1931	..	336.20	*266.90	268.50	109.30	..
1932	..	320.70	264.70	255.60	87.50	..
1933	..	305.00	277.83	*276.32	*81.59	..
1934	..	341.70	284.74	294.40	86.24	..
1935	..	358.88	321.25	*317.55	†108.67	..
1936	..	381.40	301.89	290.13	*118.20	..
1937	..	331.53	325.35	301.71	*123.39	..
1938	..	359.51	289.56	*231.39	133.37	..
1939	..	314.96	255.15	*234.74	122.67	..
1940	..	†413.29	§247.36	†279.58	†243.33	..
1941	..	†285.51	129.75	*301.31	*164.21	..
1942	..	†371.14	..	*235.37	*159.03	..
1943	..	389.03	..	271.82	171.43	..
1944	..	374.50	..	277.14	†114.80	..
1945	..	*288.44	..	*262.11	*139.27	..
1946	..	326.26	..	*267.10	*166.64	..
1947	..	288.76	..	*209.66	149.12	..
1948	..	338.02	..	213.49	*134.68	..

\* 11 months  
§ 8 months

† 10 months  
¶ 7 months

† 9 months  
|| 5 months.

||87.27  
\*183.13  
211.20

||176.12  
\*367.06  
327.56







*Above : A LIVETT-CARTWRIGHT 3-BEDROOM HOUSE*

*Below : A BRICK-BUILT 3-BEDROOM HOUSE*

*Since the war 800 of these houses have been completed with a further 1,800 in course of erection on the following estates :—Belle Isle, Beckett Park, Ireland Wood, Seacroft and Moortown.*

*Picture by courtesy of R. A. H. Livett, Esq., A.R.I.B.A., City Architect, Leeds.*



## HOUSING

*Number of Houses.*—The total number of houses and flats in the city on 31st December, 1948, was 153,581, made up approximately of 58,852 back-to-back houses and 94,729 through houses and flats.

*New Houses.*—The number of new houses and flats completed during the year was 910, of which 735 were permanent and 175 temporary. The photographs opposite illustrate two of the types of permanent houses being erected by the Corporation.

### HOUSING ACT, 1936, PART IV.—OVERCROWDING.

January 1st to December 31st, 1948.

Number of cases of overcrowding discovered in houses owned by the Corporation .. .. .	146
Number of cases of overcrowding in houses owned by the Corporation which have been relieved .. .. .	185
Number of overcrowding cases relieved during the year in course of slum clearance operation .. .. .	..
A. No. of dwellings known to be overcrowded at the end of the year .. .. .	2,661
B. No. of new cases of overcrowding reported during the year .. .. .	848
C. No. of cases of overcrowding relieved during the year ..	769
D. Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding .. .. .	12

*Housing Shortage.*—The number of applications for houses standing on the registers at the Housing Department on 31st December, 1948, was 25,368. These have been reviewed in the early months of 1949 and the number is now substantially less.

*Overcrowding.*—The housing shortage still remains acute and renders impossible anything but the relieving of the most serious cases of overcrowding.

There are 24,009 occupied dwellings on the Municipal Estates in the city and the average percentage of overcrowding during the year was 2·47 and showed a slight decrease. From privately owned houses 204 families that were found living in overcrowded conditions were rehoused during the year. Of these families, 202 have been accommodated in municipal dwellings and two in requisitioned dwellings.

There have been no applications for licences to permit temporary overcrowding during the year.

During the year 29 new cases of overcrowding were reported to the Housing Department. None of the families concerned was provided with suitable alternative accommodation on the municipal housing estates.

The number of certificates of permitted numbers during the year was 353, making a total of 88,334 certificates issued since the Housing Act, 1936.

*Repair of Houses.*—During the year 16,699 dwelling-houses were surveyed and examined and 9,304 nuisances and housing defects were remedied. Houses numbering 6,025 found to be defective in one respect or another under the Public Health Act, 1936, were repaired in response to notices served under this Act.

The number of houses inspected under the Housing Act, 1936, and found not to be in all respects reasonably fit for human habitation was 545; 167 were repaired in response to notices served under Section 9 of this Act.

Eight certificates and one report were issued under the Rent and Mortgage Interest Restrictions Acts, 1920 to 1939, in respect of houses not in a reasonable state of repair.

When private owners failed to remedy urgent housing defects or serious nuisances after the service of statutory notices, the Department carried out the necessary work as a matter of urgency. Such work in default was carried out to six houses under the Housing Acts at a cost of £92 1s. 6d., and to 22 houses under the Public Health Acts at a cost of £59 11s. 6d., these amounts being recovered from the owners of the properties concerned.

*Demolition of Insanitary Houses.*—Notwithstanding the acute shortage of housing accommodation in the city, houses have had to be represented as being dangerous as well as unfit for human habitation. Little opposition to the demolition of these houses has been encountered from the owners, as, in many cases, it was with a feeling of relief the owner learned that he was being relieved of a dubious asset. The principal difficulty experienced has been the lack of rehousing accommodation. This has meant that many houses with irremediable major defects have had to continue in occupation so long as they offered a degree of protection from the weather. The rehousing of families displaced by the demolition of their houses has been carried out by the Housing Department. The condition of some of the 108 individual houses represented is well illustrated by the photographs opposite.





NOS. 9 AND 10, MALTBY PLACE  
*Single room dwellings. Represented 5th July, 1948; houses demolished and  
 site cleared 13th April, 1949.*



NO. 10, HODGSON YARD  
*Over 200 years old and in a bad state of decay. Represented 17th April, 1948;  
 house demolished and site cleared 2nd October, 1948.*



No. 47, ELMWOOD STREET  
*Showing active danger due to bad settlement. Represented 22nd October, 1948, demolished 12th July, 1949.*



No. 14, WOODHOUSE CLIFF  
*Showing partially collapsed and dangerous roof. Represented 24th September, 1948; house demolished and site cleared 29th March, 1949.*

Demolition work in the different Unhealthy Areas has continued during the year, the total number of such houses demolished being 19. In addition, a further 13 houses have had to be demolished owing to their dangerous condition. These figures do not include the eight houses demolished in pursuance of Demolition Orders. The total demolitions during the year numbered 40 houses.

*Clearance Area Procedure.*—The number of houses which are in a very advanced state of disrepair by reason of their accelerated deterioration is such that, in many areas, the procedure of representing individual unfit houses is inadequate. The time is fast approaching, if it has not already arrived, when the question of the resumption of the clearance of unfit houses by area procedure will have to receive urgent consideration.

Mr. H. P. Gill, the Supervisory Housing Inspector, reports details of the action taken under Sections 11 and 12 of the Housing Act, 1936, in the following table :—

No. of houses represented for demolition	..	..	108
No. of Demolition Orders made	..	..	107
No. of undertakings accepted from owners	..	..	1
No. of families concerned	..	..	107
No. of persons concerned	..	..	364

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No. of dwellings represented for closing orders	..	7
No. of families concerned	..	6
No. of persons concerned	..	17

---

No. of houses demolished (S.11)	..	..	8
No. of parts of houses closed (S.12)	..	..	7
No. of families re-housed by Corporation	..	..	65
No. of families awaiting re-housing	..	..	31
No. of families found own accommodation	..	..	13
No. of families where orders for possession obtained			6
No. of houses referred for opinion but not represented			127
No. of dwellings represented in slum areas	..	..	95
No. of houses represented which were dangerous	..	..	59
No. of families which re-occupied houses where demolition or closing orders were operative	..	..	4

---

No. of houses occupied by more than one family :—										
Families	1	2	3	4	5	6	7	8	Derelict	
Houses	82	2	4	..	..	..	1	1	25	



# HOUSING ACT, 1936

Table showing the number of houses examined by the Medical Officer of Health as part of the general survey of the city during the year ended December 31st, 1948, and the numbers represented or otherwise dealt with, pursuant to the Public Health Act and Housing Acts, with the corresponding figures for 1946 and 1947.

	1946.	1947.	1948.
Number of new houses erected during the year ..	828	1,376	910
(i) By the Local Authority .. ..	440	895	719
(ii) By other bodies and persons .. ..	388	481	191
1. <i>Inspection of dwelling-houses during the year.</i>			
(1) Total number of dwelling-houses inspected for housing defects under Public Health or Housing Acts and the number of inspections made .. ..	12,449	16,596	16,699
(2) Number of dwelling-houses (included under Sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925, and the number of inspections made .. ..	89	121	142
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation .. ..	27	47	115
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation .. ..	703	375	165
2. <i>Remedy of Defects during the year without Service of Formal Notices.</i>			
Number of defective dwelling-houses rendered fit in consequence of informal action taken by the Local Authority or their Officers .. ..	601	182	60
3. <i>Action under Statutory Powers during the year.</i>			
A.—Proceedings under Section 9 of the Housing Act, 1936.			
(1) Number of dwelling-houses in respect of which notices were served requiring repairs .. ..	385	308	171
(2) Number of dwelling-houses which were rendered fit after service of Formal Notices :—			
(a) By owners .. ..	487	118	101
(b) By Local Authority in default of owners .. ..	11	7	6
B.—Proceedings under the Public Health Acts.			
(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied .. ..	9,507	9,352	8,957
(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—			
(a) By owners .. ..	1,810	1,585	6,025
(b) By Local Authority in default of owners .. ..	57	21	22
C.—Proceedings under Sections 11 and 12 of the Housing Act, 1936.			
(1) Number of dwelling-houses in respect of which			
(a) Demolition Orders were made .. ..	19	17	108
(b) Closing Orders were made .. ..	..	1	7
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders .. ..	..	13	8

## GENERAL SANITATION

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**Water.**—During the year 295 samples of drinking water were taken by the Department for either chemical or bacteriological examination. Of these 295 samples, 19 were obtained from wells and springs which supplied drinking water to various houses in the city and all were found to be reasonably satisfactory.

Two special samples were taken, by request, from a galvanised water boiler which was used for making tea in a factory canteen. These samples were chemically examined for zinc absorption, and in both cases the zinc content was found to be too small to be harmful.

The remaining 274 samples were taken from the Corporation's mains supply at various points in the city. Of these 207 were found to be satisfactory but 67 were of doubtful quality. As a result of this, additional chlorination plant has been installed to further safeguard the water supplies, with satisfactory results.

**Water Supply**—(*Report of Mr. Kenneth L. Forster, General Manager and Engineer of the Waterworks Department*).—The water supply of the city during 1948 was satisfactory in quality and quantity.

**Bacteriological Examinations.**—The following table gives details of bacteriological examinations made of raw water and water going into supply after treatment :—

Water	No. of Examinations	Results			
		Highly Satisfactory	Satisfactory	Suspicious	Un-satisfactory
Raw ..	211	5%	13%	21%	61%
Going into supply after treatment	446	..	85%	6%	9%

*Chemical Analyses.*—The following table gives a summary of chemical analyses made of town's water supply for 1948 :—

	Parts per 100,000		
	Average	Max.	Min.
Total solids dried at 100° C...	10.3	12.5	9.0
Residue on ignition .. ..	6.6	8.5	5.5
Nitrogen as free and saline ammonia ..	0.0018	0.0028	0.0005
"    " albuminoid ammonia ..	0.0123	0.0186	0.0086
"    " nitrites .. ..	..	Trace	..
"    " nitrates .. ..	0.06	0.085	0.045
Chlorine present as chloride .. ..	1.28	1.5	1.1
Oxygen absorbed in 4 hours at 20° C..	0.17	0.25	0.09
Temporary hardness as calcium carbonate ..	2.4	3.0	2.0
Permanent hardness as calcium sulphate ..	5.3	6.2	4.5
Lead .. ..	..	..	..
Iron .. ..	Trace	0.025	..
Silica .. ..	0.6	0.4	0.7
Free chlorine (parts per million) ..	0.25	1.8	..
Colour (Hazen Units) .. ..	20.0	35.0	10.0
pH .. ..	7.1	7.4	6.9

*Plumbo-Solvent Action.*—No lead was found in the Leeds water supply during the year 1948. As a precaution against plumbo-solvency, lime at the rate of approximately 0.3 grains per gallon was added to the raw water to raise the pH. The pH of water going into supply is taken daily. Weekly estimations of carbonate content are made in addition to the monthly chemical analyses.

*Action in respect of contamination.*—No action was necessary in respect of any form of contamination during the year.

*Public Water Mains.*—As at 31st March, 1949, the number of dwelling-houses within the statutory area of supply (including houses and shops but excluding lock-up shops, business premises, etc.) supplied directly by the public water mains was 166,024, the estimated population being 508,211.

No water was supplied within the statutory area by means of stand-pipes.

*Sewage Disposal.*—The Sewerage Engineer has informed me that the position with regard to obtaining replacements for defective distributing and other machinery did not improve during the year, and approximately 19 per cent. of the bacteria beds were out of action awaiting either repairs to the machinery or constructional repairs; nevertheless, in the circumstances, a reasonably satisfactory effluent has been maintained.

**Public Cleansing.**—Household refuse collected by the Cleansing Department during 1948 amounted to 139,598 tons, of which 58 per cent. was dealt with by separation and incineration, 10 per cent. by incineration and 32 per cent. by controlled tipping. An increased quantity of refuse dust extracted during mechanical separation was sold for agricultural purposes to a weight of 30,600 tons.

**Dustbins and Ashpits.**—The number of dustbins provided by the Cleansing Department and delivered to dwelling-houses in Leeds from 1st December, 1946, to 31st December, 1948, was 24,855. During the year 68 ashpits were abolished, four of these being of the sunken type. The Corporation approved grants in aid amounting to £320 7s. 9d. in connection with the abolition of 63 of these ashpits and the provision of 238 dustbins in lieu.

**Keeping of Animals.**—The number of pig-keepers in the city increased to 163. The number of pigs kept was 2,638, being an increase as compared with the previous year.

Many complaints of alleged nuisance were received and 316 visits of inspection were made to pig styes; the keeping of poultry and other animals was investigated in 111 cases.

**Rat Suppression.**—During the year 6,155 inspections were made in connection with rat infestations and it was necessary to serve 41 notices under the Rats and Mice (Destruction) Act, 1919. The number of rats caught, killed or poisoned was 4,899; premises cleared of rats numbered 38 and 26 buildings were rendered rat-proof.

The costs of the services of the four rat-catchers employed by the Department, together with the costs of rat-proofing premises, are recovered from the occupier where neglect has caused the infestation. The total amount of money collected in this connection during the year amounted to £611 9s. 9d.

**Closet Accommodation.**—Three privies and one cesspool were abolished. The position with regard to the various types of sanitary conveniences in the city at the end of the year was as follows:—

Privies	..	..	.	..	142
Pail Closets	..			..	141
Trough Closets	..			..	49
Cistern Water Closets	..			..	182,637 (approximately)

A large number of preliminary notices was served on owners of property in connection with closet accommodation and in 272 cases statutory notices had to be served. In the owners default, the water closets appurtenant to 19 houses were repaired at a total cost of £56 16s. 8d. and this amount was recovered from the owners concerned.

**Removal of Offensive or Noxious Matters.**—Contraventions of the bye-laws relating to the removal of offensive or noxious matters occurred in 35 cases and were dealt with.

**Offensive Trades.**—The number of premises in the city where offensive trades are carried on is 113. During the year 150 visits of inspection were made.

Liaison has been continued with the Town Planning Section of the City Engineer's Department and, at their request, many inspections have been made to ascertain whether various trades carried on in the city were such as should be dealt with as Special Industries and zoned into a special area of the city.

**Common Lodging-Houses.**—During the year 377 routine visits of inspection were made to common lodging-houses. The number of these common lodging-houses remains unchanged at 9, two of them providing accommodation for women.

**Houses-let-in-Lodgings.**—The total number of visits paid to houses of this type was 257. Informal action was taken in 53 cases, while 27 statutory notices had to be served.

**Cellar Dwellings and Underground Sleeping Rooms.**—During the year 35 visits were paid to underground sleeping rooms.

**Tents and Vans.**—Vigilance was exercised to ensure that no unauthorised land was used as a camping ground and 539 visits of inspection were made to tents, vans or sheds.

**Canal Boats.**—The number of canal boats on the register at the end of the year was 125; periodical visits of inspection were made to wharves and locks and a complete inspection was made of 177 boats.

**Public Conveniences.**—Repairs to the six principal conveniences with attendants were carried out to a total cost of £284 11s. 5d. The cost of repairs carried out to the unattended conveniences amounted to £814 18s. od., of which nearly a half was expenditure in connection with repairs necessitated by wilful damage.



**Public Sewers.**—During the year 133 public sewers, affecting 557 houses or other premises, were cleansed at a cost to the Department of £623 15s. 3d. Works of repair or maintenance were carried out to 41 defective public sewers, affecting 184 houses or other premises, and the cost of this work, amounting to £673 17s. 3d., was recovered from the owners of the premises served by the sewers.

**Drains.**—It was necessary to carry out 1,143 drain tests, 999 of these being in connection with complaints of nuisances, and 144 in respect of new drains re-laid in place of those found defective. A large number of preliminary notices was served on owners of property for drainage repairs and in 708 cases it was necessary to serve statutory notices under Section 39 of the Public Health Act, 1936. The drains or other appliances of 23 houses were repaired or renewed by this Department in default as a matter of urgency at a cost of £66 12s. 9d., which was recovered from the owners concerned.

The drain flushing service was continued and the income derived from private flushing amounted to £146 9s. 9d.

**Persons living in Insanitary Conditions.**—The number of cases of persons living under insanitary conditions drawn to the attention of the Department showed an increase. During the year 58 visits were paid to such cases. In many instances improvements were effected in the state of cleanliness of the premises.

**Removal of Persons in need of care and attention (Section 47, National Assistance Act, 1948).**—It was not necessary to apply to the Court for an Order for compulsory removal in any case and no certificates were issued by the Medical Officer of Health under Section 47. In ten cases removal of chronic sick, aged, infirm or physically incapacitated persons living in insanitary conditions was effected voluntarily by repeated visits of persuasion.

**Articles exchanged for Rags.**—There has been a noticeable increase in the number of offences against Section 154 of the Public Health Act, 1936, which places restrictions on articles exchanged for rags. Eight rag and bone dealers were warned in this connection. Seven persons were prosecuted for offences; one case being dismissed on payment of costs, one person was fined 5s., four persons were fined 10s. and one person was fined 20s.



**Insect Pests.**—Fly nuisance was recorded in the Cross Gates area as a result of *Anisopus Fenestralis* breeding on the bacteria beds at Knostrop Sewage Works and representations were again made to the Sewage Works Manager in regard to preventive measures. The Golden Spider Beetle (*Niptus Hololeucus*) which caused so many complaints in recent years, has not been so noticeable during the year. The routine treatment of St. James's Hospital for infestation by the Red Ant (*Monomorium Pharohensis*) commenced during the year. Gammexane Lo44 was used with great success. With systematic spraying this treatment has effected a tremendous improvement and the infestation is now definitely under control.

**Mortuary Accommodation.**—The number of bodies received into the Public Mortuary during the year was 514, comprising 478 admitted from streets, private houses, workshops, etc., 15 taken from rivers, lakes, etc., 18 from street accidents and 3 from other sources. The number received in the previous year was 538.

The Marsh Lane Mortuary functioned up to 12th September, 1948, when it was closed and the new adapted Public Mortuary at St. James's Hospital came into use.

**Nuisances.**—The number of complaints made during the year was 8,158. The total number of houses surveyed and examined in connection with nuisances and housing defects was 16,689. Nuisances abated numbered 9,304.

The number of preliminary notices served for the abatement of nuisances was 6,890 and the number of statutory notices, 2,231. Of the latter, 1,804 were effective and 427 were outstanding at the end of the year. A table follows analysing the work done by the district inspectors in 1948, but as the splitting up of the divisional work into four Divisions took place in the month of April, it is not possible to show statistics for the four Divisions separately this year.

## WORK DONE BY SANITARY INSPECTORS, 1948.

ANALYSIS OF INSPECTIONS	EASTERN & WESTERN DIVISIONS	FACTORIES, SHOPS, Etc.	CITY TOTALS
<b>DWELLINGS.</b>			
Houses recorded under Housing Regs.:-			
1. (a) fit in all respects .. ..	132	..	132
2. (b) unfit and capable of repair .. ..	355	..	355
3. (c) unfit and incapable of repair .. ..	190	..	190
4. (d) underground dwellings .. ..	35	..	35
5. Houses for drainage .. ..	7,197	..	7,197
6. Houses for ashes accommodation .. ..	1,813	..	1,813
7. Houses for closet accommodation .. ..	2,143	..	2,143
8. Houses for complaint and defects .. ..	8,157	1	8,158
9. Houses for infectious diseases .. ..	232	14	246
10. Houses for overcrowding .. ..	365	..	365
11. Houses for filthy conditions .. ..	287	..	287
12. Houses for verminous conditions .. ..	775	..	775
13. Housing re-inspections .. ..	20,850	..	20,850
14. Houses let in lodgings .. ..	257	..	257
15. Separate dwellings within houses let in lodgings .. ..	332	..	332
16. Common lodging houses .. ..	377	..	377
17. Canal boats .. ..	177	..	177
18. Sites for tents, vans, sheds, etc. .. ..	102	..	102
19. Tents, vans or sheds .. ..	539	..	539
20. Visits for enquiry .. ..	4,647	5	4,652
<b>FOOD PREMISES.</b>			
21. Ice-cream .. ..	970	8	978
22. Fried Fish .. ..	1,030	1	1,031
23. Pickles and sauces .. ..	21	8	29
24. Sausages and pork products .. ..	128	6	134
25. Other registered premises .. ..	83	8	91
26. Bakehouses .. ..	1,183	77	1,260
27. Butchers .. ..	436	3	439
28. Provision merchants .. ..	500	3	503
29. Restaurants, cafes, kitchens .. ..	16	1,838	1,854
30. Other food premises .. ..	618	89	707
31. Visits for enquiry .. ..	318	61	379
<b>TRADES AND BUSINESSES.</b>			
32. Factories with mechanical power .. ..	2	3,288	3,290
33. Factories without mechanical power .. ..	1	293	294
34. Other premises, constructional works, etc. .. ..	3	8	11
35. Workplaces .. ..	17	764	781
36. Shops .. ..	69	738	807
37. Outworkers .. ..	..	529	529
38. Offensive trades .. ..	60	90	150
39. Visits for enquiry .. ..	127	1,051	1,178
<b>SMOKE ABATEMENT.</b>			
40. Smoke observations .. ..	58	65	123
41. Grit deposit records .. ..	..	5	5
42. Boiler plant .. ..	3	62	65
43. Visits for enquiry .. ..	311	40	351
<b>GENERAL.</b>			
44. Rat infestations .. ..	3,406	156	3,562
45. Farms .. ..	209	..	209
46. Stables .. ..	237	..	237
47. Pig Styes .. ..	316	..	316
48. Poultry and other animals .. ..	111	..	111
49. Water supply .. ..	295	..	295
50. Infirm and diseased persons .. ..	58	..	58
51. Watercourses, ditches .. ..	72	..	72
52. Culverts .. ..	..	..	..
53. Other nuisances .. ..	297	2	299
54. Public conveniences .. ..	1,288	948	2,236
55. Visits for enquiry .. ..	432	41	473
56. No access visits .. ..	5,010	257	5,267
57. Other visits (not included above) .. ..	1,427	75	1,502

## WORK DONE BY SANITARY INSPECTORS, 1948.—contd.

ANALYSIS OF WORK DONE		EASTERN & WESTERN DIVISIONS	FACTORIES, SHOPS, Etc.	CITY TOTALS
<b>DWELLING REPAIRS AND IMPROVEMENTS.</b>				
58.	Roofs, valley gutters, flashings, etc. . .	2,274	..	2,274
59.	Chimney stacks, flues, pots, etc. . .	524	..	524
60.	Eaves spouts . . . . .	1,162	..	1,162
61.	Fallpipes . . . . .	651	..	651
62.	Walls, brickwork, pointing . . . . .	668	..	668
63.	Damp-proof courses provided . . . . .	14	..	14
64.	Dampness otherwise remedied . . . . .	163	..	163
65.	Wallplaster . . . . .	472	..	472
66.	Ceilings . . . . .	168	..	168
67.	Floors . . . . .	127	..	127
68.	Windows, frames, cords, etc. . . . .	382	..	382
69.	Doors, door-frames . . . . .	109	..	109
70.	Ovens, fire-ranges, grates, etc. . . . .	359	..	359
71.	Washing boilers, setpots, etc. . . . .	59	..	59
72.	Sinks, lavatory basins, etc. . . . .	159	..	159
73.	Waste pipes . . . . .	267	..	267
74.	Water supply provided . . . . .	25	..	25
75.	Food stores . . . . .	8	..	8
76.	Pavings, yards and passages . . . . .	88	..	88
77.	Repairs to water closets . . . . .	929	..	929
78.	New water closets provided . . . . .	83	..	83
79.	New pail closets provided . . . . .	3	..	3
80.	Trough closets abolished . . . . .	1	..	1
81.	Privy closets abolished . . . . .	3	..	3
82.	Pail closets abolished . . . . .	..	..	..
83.	Dustbins provided . . . . .	219	..	219
84.	Asbpits repaired . . . . .	31	..	31
85.	Sunken asbpits abolished . . . . .	4	..	4
86.	Other asbpits abolished . . . . .	64	..	64
87.	Other repairs to houses . . . . .	164	..	164
88.	Verminous houses disinfested . . . . .	38	..	38
89.	Dirty houses cleansed . . . . .	60	..	60
90.	Closets cleansed or limewashed . . . . .	22	..	22
91.	Underground dwellings made fit or closed . . . . .	4	..	4
92.	Other improvements to common lodging-houses . . . . .	7	..	7
93.	Other improvements to houses let in lodgings . . . . .	5	..	5
94.	Improvements to canal boats . . . . .	7	..	7
95.	Improvements to caravan sites . . . . .	..	..	..
<b>FOOD PREMISES.</b>				
96.	Walls, ceilings, floors, etc., repaired . . . . .	34	10	44
97.	Walls, ceilings, floors, etc., cleansed . . . . .	54	40	94
98.	Ventilation provided or improved . . . . .	15	3	18
99.	Articles, apparatus, clothing cleansed . . . . .	2	..	2
100.	Washing facilities provided . . . . .	20	1	21
101.	Washing facilities maintained . . . . .	3	..	3
102.	Other improvements . . . . .	38	3	41
<b>TRADES AND BUSINESSES.</b>				
<b>Factories.</b>				
103.	Rooms cleansed . . . . .	1	6	7
104.	Rooms ventilated . . . . .	..	1	1
105.	Reasonable temperature secured . . . . .	..	..	..
106.	Overcrowding abated . . . . .	..	..	..
107.	Floors drained . . . . .	1	2	3
108.	Insufficient conveniences remedied . . . . .	..	46	46
109.	Unsuitable/defective conveniences remedied . . . . .	..	657	657
110.	Conveniences made separate for sexes . . . . .	1	185	186
111.	Other offences remedied . . . . .	..	204	204
112.	Absence of abstract noted . . . . .	..	12	12
<b>Workplaces.</b>				
113.	Rooms ventilated . . . . .	..	7	7
114.	Overcrowding abated . . . . .	..	1	1
115.	Rooms cleansed . . . . .	1	5	6
116.	Sufficient conveniences provided . . . . .	2	31	33

## WORK DONE BY SANITARY INSPECTORS, 1948.—contd.

ANALYSIS OF WORK DONE		EASTERN & WESTERN DIVISIONS	FACTORIES, SHOPS, Etc.	CITY TOTALS
<b>TRADES AND BUSINESSES (Continued)</b>				
<b>Shops.</b>				
117. Ventilated .. .. .	..	..	4	4
118. Reasonable temperature secured .. ..	..	..	2	2
119. Sufficient conveniences provided .. ..	..	..	15	15
120. Lighting provided .. .. .	..	..	2	2
121. Washing facilities provided.. .. .	..	1	4	5
122. Meals facilities provided .. .. .	..	..	4	4
123. Other defects remedied .. .. .	..	1	51	52
<b>OFFENSIVE TRADES.</b>				
124. Byelaw offences remedied .. .. .	..	..	..	..
125. Other improvements secured .. .. .	..	..	..	..
<b>SMOKE ABATEMENT.</b>				
126. Furnaces newly provided .. .. .	..	..	5	5
127. Furnaces altered, repaired or renewed ..	..	..	2	2
128. Chimneys newly erected .. .. .	..	..	7	7
129. Chimneys extended or improved .. ..	..	..	..	..
130. Firms adopting smokeless fuel .. ..	..	..	..	..
<b>GENERAL.</b>				
131. Rats caught, killed or poisoned .. ..	..	317	173	490
132. Premises cleared of rats .. .. .	..	29	9	38
133. Premises rendered rat-proof .. .. .	..	22	4	26
134. Farm improvements.. .. .	..	..	..	..
135. Watercourses cleansed .. .. .	..	4	..	4
136. Culverts cleansed or maintained .. ..	..	..	..	..
137. Poultry-house improvements .. .. .	..	2	..	2
138. Pig-stye improvements .. .. .	..	2	..	2
139. Offensive matter removed .. .. .	..	46	14	60
140. Manure removed .. .. .	..	17	1	18
141. Manure-steads built or repaired .. ..	..	1	..	1
142. Public convenience repairs and painting..	..	60	23	83
143. Other nuisances abated .. .. .	..	90	16	96
<b>DRAINAGE.</b>				
144. Drains repaired .. .. .	..	185	82	267
145. Drains relaid .. .. .	..	119	20	139
146. New drains laid .. .. .	..	55	27	82
147. Drains cleansed .. .. .	..	817	69	886
148. Public sewers maintained .. .. .	..	46	3	49
149. Public sewers cleansed .. .. .	..	138	5	143
150. Ball and water tests .. .. .	..	122	22	144
151. Other tests .. .. .	..	922	77	999
152. Gullies renewed or provided .. .. .	..	78	82	160
153. Soilpipes and ventilating pipes .. ..	..	73	18	91
154. Inspection Chambers .. .. .	..	24	13	37
155. Cesspools repaired or provided .. ..	..	..	..	..
156. Cesspools emptied .. .. .	..	1	..	1
157. Cesspools abolished .. .. .	..	1	..	1

## DISINFESTATION AND DISINFECTION

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**House Disinfestation.**—During the year 775 dwelling-houses in Leeds were inspected in connection with vermin infestation. Corporation houses found to be bed-bug infested numbered 115, and the number of privately owned dwelling-houses found to be infested was 341.

During an experimental period of six months, from April to September, it was arranged in collaboration with the Housing Department to disinfest 50 per cent. of the notified verminous Corporation dwellings by hydrogen cyanide and 50 per cent. by liquid or powder insecticide.

The hydrogen cyanide treatments were carried out by contractors under the supervision of the Disinfestation Section of the Health Department, whilst the D.D.T. spray treatments by liquid or powder insecticides were executed by the staff of the Section.

At the end of the six months period it was found that of the 40 dwellings treated by hydrogen cyanide, only 18 were actually bug infested, whereas the remainder were subjected to the treatment as a precautionary measure only. Of the treatments 39 proved successful, but one dwelling became re-infested soon afterwards and was subsequently treated successfully with liquid insecticide.

All of the 38 D.D.T. spray treatments proved successful ; there were no re-infestations reported.

As a result of this experimental period it was agreed to discontinue the hydrogen cyanide treatment of dwelling-houses and, since July, liquid and powder insecticides only have been used for insect pest control.

Disinfestation work is mainly confined to Corporation dwellings but on the request of owners and tenants quite a number of private dwellings, including one large hotel, several hospitals and factories, were disinfested.

The process of disinfestation by insecticide varies according to the species of insect and degree of infestation, but generally speaking D.D.T./Kerosene is used for bug and fly infestations, whereas





#### DISINFESTATION SQUAD

*Showing equipment used for the spraying of dwelling-houses. The nozzle and rod have been adapted from a Four Oaks Sprayer; the compressor is a B.E.N. petrol-driven machine; the pressure tank containing the liquid, although specially designed, was manufactured by the B.E.N. Company. Personnel are wearing plastic gloves and Martindale masks.*





Gammexane is employed in cockroach, red ant and wood-worm control. The appliances used comprise air compressors, both petrol and electrically driven, pressure tanks, Four Oaks Sprayers suitably adapted, hand powder blowers and mechanically operated powder distributors.

The disinfection of furniture and other articles from slum-clearance houses by hydrogen cyanide in special container vans at the Disinfesting Station at Stanley Road continues as before.

Bedding and other articles, unsuitable for hydrogen cyanide treatment, are steam disinfested by the three disinfestors at the Stanley Road Station. It is hoped that the Disinfesting Station at Kidacre Street, which has been closed during 1948 owing to want of steam, will be operating again by the end of 1949 with its own steam generating plant.

**Flushing Service.**—This service has been re-organised by the Supervisor. Three squads of men were used to cleanse the City's conveniences, these men being suitably equipped with drainage appliances and flushing hose. Of the 54 unattended conveniences, about 50 per cent. received daily attention, these being mainly situated in the centre of Leeds, whilst the remainder were cleansed on alternate days. These flushing squads were also regularly employed for the removal of stoppages and the cleansing of drains of private dwellings and factories.

**Vermineous Persons.**—Persons infected by *pediculosis corporis* (body lice) were treated at the Stanley Road Disinfesting Station. Treatment included a hot bath, followed by the application of an insecticide, and the steam treatment of the infested clothing.

The treatment of *pediculosis capitis* (head lice) was carried out by a trained staff at the Kidacre Street Disinfesting Station, where a part of the station had been suitably equipped for this purpose. Treatment was mainly confined to school children and contacts, and close collaboration was maintained with the School Medical Service.

The number of visits to houses in connection with *pediculosis capitis* was 71, and the number of persons provided with baths in this connection was 391.

Mr. C. W. Lamb, Supervisor of the Disinfecting and Disinfestation Station at Stanley Road, reports details of the work carried out in the following tables.

## DISINFESTATION

WORK CARRIED OUT IN CONNECTION WITH CORPORATION  
PROPERTY AT THE REQUEST OF THE HOUSING DEPARTMENT.

(a) No. of houses disinfested by hydrogen cyanide..	40
(b) " " " " " insecticide ..	202
(c) " " articles " " hydrogen cyanide..	21,515
(d) " " " " " steam ..	7,410

WORK CARRIED OUT IN CONNECTION WITH DWELLING-  
HOUSES OTHER THAN CORPORATION PROPERTY

(e) No. of houses disinfested by hydrogen cyanide..	..
(f) " " " " " insecticide ..	176
(g) " " articles " " hydrogen cyanide..	2,335
(h) " " " " " steam ..	6,344

## DISINFECTION

WORK CARRIED OUT FOLLOWING INFECTIOUS DISEASES

(a) No. of rooms disinfected by Formaldehyde ..	1,063
(b) " " articles " " steam ..	15,679

## PEDICULOSIS CAPITIS.

Year.	No. of persons treated.	No. of treatments involved.	No. of visits paid to houses.
1944	1,178	2,008	1,688
1945	3,808	4,987	3,098
1946	2,946	3,502	2,699
1947	2,303	2,611	2,054
1948	2,752	2,903	2,220

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**Report of the  
City Analyst**

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## MUNICIPAL LABORATORY

BY

C. H. MANLEY, M.A., F.R.I.C., *City Analyst.*

The following is a summary of the analyses made during 1948:—

Samples submitted by Inspectors under the Food and Drugs Act, 1938, and Defence (Sale of Food) Regulations, 1943..	..	..	..	..	..	1,551
Samples submitted by Inspectors under the Fertilisers and Feeding Stuffs Act, 1926 ..	..	..	..	..		15
Samples analysed for the British Electricity Authority						3
Samples analysed for the Central Purchasing Department						25
Samples analysed for the Chief Constable	..	..				74
„ „ „ City Architect	..	..				1
„ „ „ City Engineer	..	..				1
„ „ „ Cleansing Department	..					6
„ „ „ Medical Officer of Health	..					15
„ „ „ Ministry of Fuel and Power						22
„ „ „ Parks Department	..	..				9
„ „ „ St. James's Hospital	..					5
„ „ „ Waterworks Engineer	..					19
„ „ „ Weights and Measures Department	..	..				1
„ „ „ Atmospheric Pollution Committee (1) Rain Gauges						72
(2) Sulphur Dioxide Tests						70
(3) Light Tests	..				1,373	
						1,515
						<hr/>
Total	..	..				3,262

## FOOD AND DRUGS

The table on pages 164, 165 and 166 summarises the samples taken under the Food and Drugs Act, 1938, and the Defence (Sale of Food) Regulations, 1943.

The percentage of adulteration was 7·8 as compared with 6·5 for 1947.

The tables on pages 121 and 122 list the summonses issued respecting those adulterated samples in respect of which legal proceedings were instituted.

**Milk.**—The average composition of the 1,323 samples analysed was as follows, the corresponding figures for 1947 and 1939 being given for comparison :—

comparison :—				1948	1947	1939
Non-fatty solids	..	..	8.69%	8.67%	8.78%	
Fat	..	..	3.64%	3.67%	3.71%	
<hr/>						
Total solids	..	..	12.33%	12.34%	12.49%	

Of the 85 unsatisfactory samples (representing 6.4 per cent.) 57 contained added water, 12 were fat deficient and 16 showed both added water and fat deficiency. The greatest proportion of added water found in any milk procured by the Sampling Officers was 33.0 per cent. in an informal sample and 30.0 per cent. in a formal sample, whilst the greatest fat deficiency was 46.7 per cent.

The Sale of Milk Regulations, 1939, require minima of 8.5 per cent. non-fatty solids and 3.0 per cent. fat in milk. These modest demands are appreciably less than the average annual figures, even when the adulterated samples are included, and it therefore by no means follows that, because milk conforms to regulation requirement, it is unwatered. On the other hand it sometimes happens that a milk contains less than 8.5 per cent. non-fatty solids and yet owes its poor quality to natural causes. In both these cases the freezing point test furnishes valuable information both of a qualitative and a quantitative nature.

**Crushed Almonds (1).**—*No. 851L.*—This brown product sold by retail in the market contained only 19.2 per cent almond oil instead of an expected 48.0 per cent.-60.0 per cent. It was therefore at least 60.0 per cent. deficient in oil. On the case being brought before the Court on 5th November, the defence contended that crushed almonds were quite distinct from ground almonds, not only in appearance, but also in the content of their oil, a large proportion of which it was usual to express in the crushing process. Had the product been sold as almond flour or meal, the prosecution would have agreed. It transpired that it had been invoiced as "meal," with a direction that it was intended only for baking and confectionery purposes, and that it must not be sold by retail. The retailer was found guilty and fined a sum of £5.



**Ground Almonds (2).**—By contrast with the unsatisfactory product sold as “crushed almonds” these contained 57.2 per cent. and 56.9 per cent. almond oil respectively.

**Ground Almond Substitute (1)**—*No. 284F.*—This consisted of 82.0 per cent. wheat flour and 18.0 per cent. soya flour, the oil content being only 5.2 per cent. on account of the preponderating proportion of wheat flour present. It is considered that a ground almond substitute should contain at least 20.0 per cent. oil, an object attainable by using flavoured soya or peanut flour, or a mixture of these with or without wheat flour. On this basis the sample was 74.0 per cent. deficient in oil, and was certified accordingly, the retailer receiving a warning letter.

**Baking composition (1) and Cooking fat (2).**—Whilst one of the two samples of cooking fat was of satisfactory composition, the other sample was not a fat at all, but, like the sample sold as “baking composition,” consisted of white vaseline. It was advertised as requiring no points and no coupons and was said to have come from a farm in the heart of the country. Unlike cooking fat it of course possessed no food value. Proceedings were instituted against the retailer, but the case was dismissed on a legal point, the information having alleged that the sample was not of the quality demanded. Defending Counsel submitted that, so far from not being of the quality demanded, it was not cooking fat at all, and therefore “nature” and not “quality” was the question involved.

**Baking Powder (10).**—All were of satisfactory aeration value, the available carbon dioxide varying from 8.1 per cent. to 13.3 per cent.

**Beer (9).**—The alcohol content of the 9 samples submitted varied from 2.3 per cent. to 3.6 per cent. with an average of 3.1 per cent.

**Bread (1).**—*No. 213L (Informal).*—The black substance found in a cavity in one side of the loaf proved to be dirty grease.

**Butter (5).**—Of 5 samples, one informal sample had a disagreeable taste of firelighters as though it had been in contact with material impregnated with creosote.

**Currant Cake (1)**—*No. 215L (Informal).*—Following a complaint as to taste, this was found to contain 5.0 per cent. edible fat and 20.0 per cent. soft paraffin and was reported on adversely owing

to the presence of this latter ingredient. During 1948 evidence was accumulating of the increasing use of mineral oil and soft paraffin in confectionery sold by retail, and apprehension felt respecting the possible danger to health especially when impure brands were used. Considerable welcome is therefore given to The Mineral Oil and Food Order, 1949, which prohibits the use of mineral oil in the composition or preparation of any article of food intended for sale or sold for human consumption. In this connection "mineral oil" means any hydrocarbon product, whether liquid, semi-liquid or solid, derived from any substance of mineral origin and included liquid paraffin, white oils, petroleum jellies and hard paraffin.

**Candied Peel (1)**—*No. 393F (Informal)*.—This was received as the result of a complaint and was reported as unsatisfactory, for, although it consisted of pieces of the sweetened peel of citrus fruits, it was dark and unpalatable, probably as the result of over heating and consequent charring.

**Cream (1)**—*No. 663L*.—This represented a bottle bought off a roundsman. On analysis it was found to contain 25 per cent. butter fat and was therefore correctly described, but as the sale of cream was still illegal at the time of purchase, the attention of the Divisional Food Office was called to the matter.

**Custard Powder (6)**.—Two of these samples, viz., an informal sample, and the formal sample which followed it, were unsatisfactory, being inferior substitutes containing no prepared starch, but consisting of a mixture of flavoured and coloured rye and wheat flours (Nos. 342L and 361L). No proceedings were instituted, as it transpired that the product had been correctly sold by the wholesaler to the retailer as "custard sauce powder," and its manufacture carried out under licence from the Ministry of Food. The remaining four samples were satisfactory. In fact much of the custard powder coming on to the market is of pre-war quality, consisting of coloured and flavoured maize starch.

**Dressed Crab (4)**.—The two formal samples (Nos. 331L and 332L) were purchased following a complaint that this commodity, as sold in one of the Leeds shops, seemed to contain insufficient crab meat, as judged by the taste. On analysis they were found to contain 50 per cent. and 67 per cent. crab meat respectively.

Two informal samples procured from two separate sources, each consisted on the other hand of 100 per cent. crab meat, apart from the parsley decoration. Proceedings were instituted only against the firm retailing No. 331L, these being in the nature of a test case, and supporting evidence was sought from and given by Mr. D. J. T. Bagnall, the Hull City Analyst, and is herewith gratefully acknowledged. It transpired that the preparation had been made in a haphazard manner, little regard being paid to the proportion of bread filler incorporated in the finished article. The Court, whilst not agreeing with the opinion that dressed crab should consist entirely of crab meat (apart from the herbal decoration and supporting shell) held that 50 per cent. crab meat was insufficient to justify the description, and registered a conviction, imposing a fine of 20s. An informal sample of Dressed Crab Paste (No. 476L) purchased about the same time, was found to contain only 40 per cent. crab meat as against the 70 per cent. minimum required by law in the case of a fish paste.

**“Irish Compound”**—No. 296L (*Informal*).—This product, purchased informally, consisted of 12.0 per cent. fat and 88.0 per cent. water. In composition it might be regarded as margarine in reverse, margarine containing a maximum of 16.0 per cent. water and the remainder chiefly fat.

**Lollipops (4)** *Informal*.—Nos. 736L—739L.—These as sold consisted of frozen water which had been flavoured, coloured and sweetened and the product supported on a stick. The dissolved solids were 3.1 per cent., 0.7 per cent., 0.7 per cent., and 19.5 per cent. respectively. An interesting point was raised in connection with the manufacture of these as to whether or not they were subject to the Ice Cream (Heat Treatment) Regulations, 1946.

**Maté (1)**—No. 698L.—This was a greenish flaked powder containing 1.2 per cent. caffeine as against the average 3.5 per cent. found in an Indian tea. When made into a beverage, Maté (or Paraguay tea) is of inferior taste to ordinary tea.

**Rum (9)**.—One of these (an informal one) contained 18.0 per cent. excess water, but owing to the unsatisfactory circumstances of the case the matter was not pursued further.

**Salad Cream (3)**.—The first of these having proved unsatisfactory, a repeat sample was taken of it along with a sample of another brand, both being Dutch products (Nos. 1020L and 1033L).

Although the edible vegetable oil contents were satisfactory, being at least 25.0 per cent. in each case, as required by the Food Standards (Salad Cream and Mayonnaise) Order, 1945, there was a marked deficiency in egg yolk solids, there being a measure of the egg yolk used either as such or as whole egg or dried egg to emulsify and stabilise the salad cream. The respective amounts of egg yolk solids found were 0.65 per cent. and 0.48 per cent. as against the required minimum of 1.35 per cent., the corresponding deficiencies being 51.8 per cent. and 64.4 per cent. Various English brands examined by the same means were on the other hand satisfactory as regards both oil and egg content. Court proceeding in respect of No. 1033L took place on May 17th and 18th, 1949, when the defence, whilst admitting a deficiency in egg, maintained that it was of much lower order than that alleged by the prosecution. The Stipendiary Magistrate decided to dismiss the case without costs. At the time of writing this report an Appeal to the High Court is under consideration.

**Beef Sausage (6).**—Two formal samples (Nos. 73F and 140F) contained only 30.0 per cent. and 45.0 per cent. meat respectively, instead of an expected 50.0 per cent. minimum. Proceedings were successfully instituted in respect of No. 73F against the firm making and retailing the sausages, and a fine of £5 imposed.

**Spreading Potted Meat (1)**—No. 311L.—This formal sample contained only 56.0 per cent. meat, this being no more than would be associated with a meat paste, which was considered the correct description for such a product.

**Stafford Starch Concentrated (4).**—Following a warning by the Ministry of Food that this packeted product must on no account be used in food of any kind owing to considerable quantities of it containing a dangerous poison introduced inadvertently during manufacture, two samples were procured from a local wholesaler, who understood that, whilst one of these (No. 255L Informal) contained poison, the other (No. 254L Formal) contained none. Analysis confirmed this belief, No. 255L consisting of 55.0 per cent. barium carbonate (a rat poison) and a mixture of starches, and No. 254L consisting of 79.0 per cent. commercial chalk, 20.0 per cent. powdered white gum and 1 per cent. carbonate of soda. As No. 254L, however, contained no starch, it was reported against on the ground that as an article of goods it bore a false trade description,

and that alternatively, if regarded as a food or drug, it was not of the nature, substance or quality demanded, and that its label falsely described it.

It transpired that the manufacturers had been convicted in two other localities in respect of this particular commodity and it was eventually decided not to institute proceedings provided that all stocks outstanding in the Leeds area were withdrawn from sale within a specified time.

A control sample of Household Blended Starch (No. 262L Informal) stated to have been made according to a national controlled formula consisted of 80.0 per cent. mixed starches and 20.0 per cent. mineral matter.

Six months later, despite the undertaking to withdraw outstanding stocks, the starch in question was discovered in two different shops, each sample submitted for analysis contained approximately 50.0 per cent. barium carbonate and 50.0 per cent. starch. On this occasion a warning letter was sent to the manufacturer by the Town Clerk.

**"Sweepth"** (1) (*Formal*).—This consisted of 51.0 per cent. sugar, 28.0 per cent. fat, 19.0 per cent. household milk and 2.0 per cent. dried egg. It was intended as a useful addition to the fat ration for cooking purposes.

**Malt Vinegar (14) and Distilled Malt Vinegar (3).**—One bottled sample (No. 671L) sold as malt vinegar proved to be 100 per cent. non-brewed vinegar, being none other than a diluted and coloured solution of acetic acid. Following completion of the purchase, the Sampling Officer observed that in smaller type were the qualifying words "pure distilled." Had the sample been even pure distilled malt vinegar, it would have been a high class product. A second purchase was made from the same shop five days later, pure distilled malt vinegar being demanded (No. 685L). The product obtained was not identical with the first, but was either non-brewed vinegar or spirit vinegar which had been stored in a wine cask. Extensive enquiries were made at the warehouse from which the retailer was supplied, and it was stated that artificial vinegar as well as brewed vinegar was being bottled and that a labelling error must have occurred in connection with this particular consignment. Informal samples obtained from two other shops supplied by the wholesaler were, however, also found to be unsatisfactory, as was a warehouse



sample described as "Belgian Pure Distilled Vinegar," containing 9.5 per cent. acetic acid and stated to be the basis of the retailed article. When proceedings were instituted the defence failed to appear. In finding the case proved, the Bench considered the labels most misleading and the substitution a serious one. A fine of £10 in respect of each sample was imposed (£20 in all).

Incidentally, this was the first case heard in Leeds involving the sale of artificial vinegar in response to a demand for malt vinegar, as distinct from either vinegar or table vinegar.

**Vinegar (Non-Brewed) (1).**—*No. 197L (Formal).*—This contained 68.0 per cent. excess water and only 32.0 per cent. non-brewed vinegar, the acid content being only 1.28 per cent. It was found that the woman retailer was diluting a non-brewed vinegar concentrate in a very haphazard manner. Incidentally, it was discovered that, even had the directions been followed to mix one pint of the concentrate with eleven pints of water, a product containing barely 4 per cent. acetic acid would have resulted. To ensure a 4 per cent. minimum ten pints of water only to one pint of concentrate should be used. A warning letter was sent to the manufacturers and the retailer advised to undertake no further diluting of the vinegar concentrate with a view to selling the diluted product.

**Sugar (1).**—*No. 896L (Informal).*—This sample which was associated with a householder's complaint, was found to consist of 86.6 per cent. sugar and 13.4 per cent. epsom salts. The actual cause of this admixture was never ascertained, but, in view of the fact that this was an isolated complaint, it was strongly suspected that the epsom salts had been introduced after the sugar had been purchased from the grocer. No action of any kind was taken.

**Dried Thyme (1).**—*No. 199L (Formal).*—This contained 8.0 per cent. small stones and grit. No proceedings were recommended in view of the surprising lenient limit allowed for this herb in the B.P. Codex, 1934.

**Whale Sausage (1).**—*No. 286F (Formal).*—No beef sausage being available when one of the Sampling Officers visited a certain butcher's shop, whale sausage was offered and accepted. As it was found on analysis to contain only 25 per cent. meat, it was certified, it being felt that the purchaser had the right to expect as much meat in whale



sausage as in beef or pork sausage. On enquiry it was learnt that the sausages had been made from a so-called " whale mixture " consisting of dehydrated powdered whale meat, cereal and flavouring and containing the equivalent of 270 per cent. undried whale meat. It was further ascertained that, had the maker followed the supplier's directions to mix 1 lb. powder with 1 lb. water and 3 to 4 lbs. well soaked rusk, he would have obtained sausage meat containing 45 to 50 per cent. meat. On proceedings being instituted, the retailer was discharged on proving warranty, and the manufacturer found guilty, fined £10 and ordered to pay £2 2s. costs.

**Drugs.**—The 7 samples analysed were all of satisfactory quality.

### OTHER ANALYSES

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In addition to the work carried out in connection with the Fertilisers and Feedings Stuffs Act, 1926, analyses were made for nine Corporation Departments as well as for St. James's Hospital; the Ministry of Fuel and Power; the newly constituted British Electricity Authority; and the West Riding Regional Smoke Abatement Committee.

Since the coming into force on 1st June of the Motor Spirit (Regulation) Act, 1948, a number of samples of both private and commercial petrol have been examined for the Ministry of Fuel and Power and for the Police. Not only were several commercial (red) petrols identified by the official tests for the presence of the tell-tale ingredient diphenylamine but also one sample of yellow petrol, closely resembling private motor spirit, was found to be none other than the commercial variety from which the red colour must have been removed. A case of the admixture of Kerosene with motor spirit was also encountered.

Many determinations of the alcoholic contents of beer have been made for the Police in connection with the serving of intoxicating liquors during prohibited hours.

An investigation was also undertaken for the Parks Department in connection with the deaths of hundreds of fish in the upper lake at Roundhay Park during the heat wave in July.

Following a Police report of a smell resembling geraniums in the Cardigan Road district, the Medical Officer of Health submitted a crystalline substance used in an oil-fired boiler by a firm in the Kirkstall Road district for heat-transfer in the processing of oils.

In the absence of any oil to be processed, this substance had remained in a state of vapour and had been blown off through the safety valve. It proved to be di-phenyl oxide (or phenyl ether), a compound which bears the same relation to carbolic acid as does ordinary ether to alcohol. Fortunately, no question of injury to health to those inhaling the vapour was involved.

**Atmospheric Pollution.**—The work for the West Riding of Yorkshire Regional Smoke Abatement Committee has been continued. The Medical Officer of Health acts as Honorary Secretary of this Committee, and through him the results are communicated to the Department of Scientific and Industrial Research for recording and comparison with the figures obtained by other Local Authorities taking part. Observations have been made at six sites throughout the year, and at a seventh (Burley Park) in the last two months of the year.

The work falls into three parts involving the determination of :—

- (1) The soot and mineral matter collected each month in rain gauges.
- (2) The sulphur dioxide gas discharged into the atmosphere each month.
- (3) The daily intensity of the sunlight.

The average results obtained are shown in the following table :—

SITE.	Rain Gauges	Lead Peroxide Method	Light Tests
	Average monthly deposit in tons per sq. mile	Average daily sulphur pollution as mgrms. of $\text{SO}_2$ per 100 sq. cms. of fabric exposed	Daily average in mgrms. of Iodine liberated.
Headingley .. ..	13·6	2·9	4·3
Market Buildings .. ..	28·2	4·3	4·6
Hunslet .. ..	17·8	3·6	4·9
Temple Newsam .. ..	12·2	2·7	5·1
Armley Park .. ..	27·3	3·7	5·1
St. James's Hospital .. ..	17·6	3·8	5·5
Burley Park (2 months only)	64·1	..	..

In conclusion I wish to extend to my Deputy, Mr. Arthur Alcock, A.M.C.T., F.R.I.C., my Chief Assistant Mr. John Drinkall, B.Sc., and other members of the staff, my best thanks for their valued services and loyal co-operation during the year under review.

FOOD AND DRUGS ACT, 1938.  
SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1948.

Article.	No. examined.			No. adulterated.			Percentage adulteration.
	Formal	Informal	Total	Formal	Informal	Total	
FOOD :—							
Almonds, Crushed ..	I	..	I	I	..	I	100·0
„ ground ..	..	2	2	..	..	..	..
„ Substitute, Ground ..	I	..	I	I	..	I	100·0
Arrowroot .. ..	I	..	I	..	..	..	..
Baking Composition ..	I	..	I	I	..	I	100·0
Baking Powder .. ..	10	..	10	..	..	..	..
Barley, Flaked .. ..	I	..	I	..	..	..	..
„ Flour .. ..	I	..	I	..	..	..	..
„ Pearl .. ..	2	..	2	..	..	..	..
Beer .. ..	9	..	9	..	..	..	..
„ Black .. ..	I	..	I	..	..	..	..
Bramble Jelly .. ..	I	..	I	..	..	..	..
Brawn .. ..	I	..	I	..	..	..	..
Bread .. ..	..	I	I	..	I	I	100·0
Butter .. ..	I	4	5	..	I	I	20·0
Cake, Currant .. ..	..	I	I	..	I	I	100·0
Cake and Pudding Mixture	6	..	6	..	..	..	..
Candied Peel .. ..	..	I	I	..	I	I	100·0
Chicken Broth, Concentrated .. ..	..	I	I	..	..	..	..
Chocolate Cup .. ..	I	..	I	..	..	..	..
Cocoa .. ..	7	..	7	..	..	..	..
Cooking Fat .. ..	2	..	2	I	..	I	50·0
Cooking Oil .. ..	3	I	4	..	..	..	..
Cornflour .. ..	2	..	2	..	..	..	..
Cream .. ..	I	..	I	..	..	..	..
Curry Powder .. ..	3	..	3	..	..	..	..
Custard Powder .. ..	2	4	6	I	I	2	33·3
Dressed Crab .. ..	2	2	4	2	..	2	50·0
Dressed Crab Paste ..	..	I	I	..	I	I	100·0
Egg, Dried .. ..	..	3	3	..	..	..	..
„ Dried, Sugared .. ..	..	I	I	..	..	..	..
„ Liquid, Frozen .. ..	..	I	I	..	..	..	..
Fish Cakes .. ..	I	..	I	..	..	..	..
Fish Savouries .. ..	I	..	I	..	..	..	..
Gelatine, Edible, Powdered .. ..	2	..	2	..	..	..	..
Carried forward ..	64	23	87	7	6	13	..

## FOOD AND DRUGS ACT, 1938.

SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1948—continued.

Article.	No. examined.			No. adulterated.			Per-centage adultera-tion.
	Formal	Informal	Total	Formal	Informal	Total	
Brought forward ..	64	23	87	7	6	13	..
Gin .. ..	1	..	1	..	..	..	..
Ginger, Ground ..	2	..	2	..	..	..	..
Ice Cream Powder ..	2	..	2	..	..	..	..
Icing Sugar ..	..	1	1	..	..	..	..
" Irish Compound "	..	1	1	..	..	..	..
Jam (Various) ..	5	2	7	..	..	..	..
Jelly Mould ..	1	..	1	..	..	..	..
Kali .. ..	..	1	1	..	..	..	..
Lard Oil, Pure ..	..	1	1	..	..	..	..
Lemonade ..	..	1	1	..	..	..	..
" Powder ..	1	..	1	..	..	..	..
" Crystals ..	2	..	2	..	..	..	..
Lollipops ..	..	4	4	..	..	..	..
Macaroni ..	1	..	1	..	..	..	..
Malted Milk ..	..	2	2	..	..	..	..
Maté .. ..	1	..	1	..	..	..	..
Marmalade ..	1	..	1	..	..	..	..
Margarine ..	..	1	1	..	..	..	..
Meat Lunch ..	..	1	1	..	..	..	..
Milk .. ..	1,312	11	1,323	81	4	85	6.4
" Dried ..	..	2	2	..	1	1	50.0
Mint, Dried ..	1	..	1	..	..	..	..
Mock Rice ..	1	..	1	..	..	..	..
Mustard Compound ..	1	..	1	..	..	..	..
Oil Emulsion, " Golden "	..	1	1	..	..	..	..
Olive Oil ..	..	1	1	..	..	..	..
Onion, Dehydrated ..	3	..	3	..	..	..	..
Pancake Mixture ..	1	..	1	..	..	..	..
Parsley, Dried ..	5	..	5	1	..	1	20.0
Pea Flour ..	1	..	1	..	..	..	..
Pepper, Black ..	1	..	1	..	..	..	..
" White ..	3	..	3	..	..	..	..
Plums, Tinned ..	..	1	1	..	..	..	..
Red Cabbage in Malt Vinegar ..	1	..	1	..	..	..	..
Rhubarb, Tinned ..	..	1	1	..	..	..	..
Rum .. ..	8	1	9	..	1	1	11.1
Sage, Rubbed ..	2	..	2	..	..	..	..
Carried forward ..	1,421	56	1,477	89	12	101	..

## FOOD AND DRUGS ACT, 1938.

SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1948—continued

Article.	No. examined.			No adulterated.			Per cent adulteration.
	Formal	Informal	Total	Formal	Informal	Total	
Brought forward ..	1,421	56	1,477	89	12	101	..
Salad Cream .. ..	3	..	3	3	..	3	100·0
„ Dressing .. ..	..	1	1	..	..	..	..
„ Oil .. ..	1	..	1	..	..	..	..
Sausage .. ..	..	1	1	..	..	..	..
„ Beef .. ..	6	..	6	2	..	2	33·3
Semolina .. ..	3	1	4	..	..	..	..
“ Shortnol ” .. ..	..	1	1	..	..	..	..
Slab Oil .. ..	..	1	1	..	..	..	..
Soup, Dessicated Tomato	1	..	1	..	..	..	..
Soup Powder .. ..	1	..	1	..	..	..	..
Spice, Mixed .. ..	3	..	3	..	..	..	..
Spreading Potted Meat ..	1	..	1	1	..	1	100·0
Starch .. ..	..	1	1	..	..	..	..
„ Household Blended	1	1	2	..	..	..	..
„ Stafford	..	..	..	..	..	..	..
Concentrated ..	3	1	4	3	1	4	100·0
“ Sweepfat ” .. ..	1	..	1	..	..	..	..
Sugar .. ..	..	1	1	..	1	1	100·0
Tea .. ..	4	..	4	..	..	..	..
Thyme, Dried .. ..	3	..	3	1	..	1	33·3
Vermicelli .. ..	1	..	1	..	..	..	..
Vinegar, Distilled ..	..	1	1	..	1	1	100·0
„ Distilled Malt ..	1	2	3	1	2	3	100·0
„ Malt .. ..	13	1	14	1	..	1	7·1
„ Non-brewed ..	1	..	1	1	..	1	100·0
„ Non-brewed, Concentrated ..	..	1	1	..	1	1	100·0
Whale Mixture .. ..	..	1	1	..	..	..	..
Whale Sausage .. ..	1	..	1	1	..	1	100·0
Whiskey .. ..	4	..	4	..	..	..	..
DRUGS :—							
Aspirin Tablets .. ..	1	..	1	..	..	..	..
Epsom Salts .. ..	1	..	1	..	..	..	..
Indigestion Tablets ..	1	..	1	..	..	..	..
Iron Tonic Pills (Blood)	1	..	1	..	..	..	..
Lung Mixture .. ..	..	1	1	..	..	..	..
Saccharin Tablets ..	1	..	1	..	..	..	..
“ Vinecta ” .. ..	1	..	1	..	..	..	..
Total .. ..	1,479	72	1,551	103	18	121	7·8